

CIO

BUSINESS TECHNOLOGY LEADERSHIP

PROJECT MANAGEMENT

Fact: Agile methodologies work. So why aren't CIOs adopting them?

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THE TELECOM TANGLE

Suddenly, it's your job to manage telecom. Here's how to do it right.

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SOFTWARE AS A SERVICE

THE SaaS TIPPING POINT

When does SaaS begin to make sense for your business? Here's what you need to know to make smart decisions.

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IMPLEMENTING ITIL

The biggest payoff comes from changing your IT culture, not just your IT processes.

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A photograph of a server room with yellow caution tape that reads "VoIP AS YOU ARE." draped across the equipment. The tape is strung in a crisscross pattern over several large, light-colored server cabinets. On the right, a rack of electronic components is visible, including a device with a handle and a fan. The floor is made of square tiles, and the overall lighting is dim, creating a somewhat somber or restricted atmosphere.



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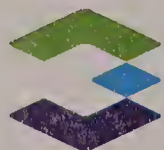
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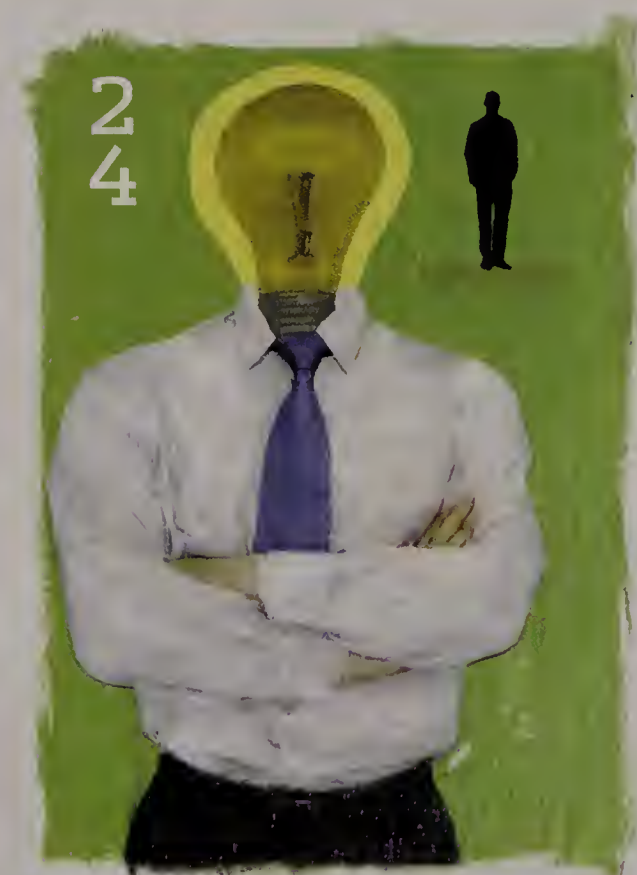


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[CHANGE AGENTS]

Leading Change, Effectively

If you want to lead your organization to achieve its goals—and prove yourself as a standout CIO—then you need to learn how to lead the charge on change. Read “Becoming a Change Leader” by organizational consultant Maya Townsend, which lays out ways to both head the pack and engage your staff in making necessary changes. It's in CIO.com's Career section.

» www.cio.com/article/108351

[TUTORIAL]

THE ABCS OF SOFTWARE AS A SERVICE

After you've absorbed this month's cover story, “Get Smart About SaaS” (see Page 28), go to CIO.com for an online tutorial you can use—and share with others—to understand more about the origins of software as a service, the security red flags to avoid and where it makes sense to implement the technology.

www.cio.com/article/109704

[OFFSITE I.T. WORKERS]

TIPS FOR CIOS FROM TELECOMMUTERS

We talked to IT workers who telecommute about what to do—and what not to do—to establish productive working relationships and keep them going. See “Getting Clueful: Seven Things the CIO Should Know about Telecommuting.”

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[CIO KNOWLEDGE SPACE]

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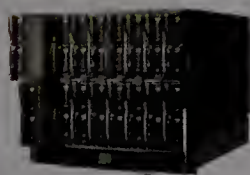
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FROM THE EDITOR

IT As Underwear

It may not be glamorous, but seeing IT in a new way works



The other day Frank Gens, a senior vice president of research at IDC (a sister company to *CIO*'s publisher), briefed a gaggle of *CIO* editors about software as a service (SaaS): the direction of the market (up, up, up!); the evolving target customer for the big vendors (SMBs); the drivers behind enterprise adoption (line-of-business executives, who are less timid about the SaaS model than CIOs); what those executives are looking for (business value and business relevance, what else?); why CIOs should focus on SaaS now ("It

gets your head out of the infrastructure and into the business," said Gens) and the role of IT in the future enterprise.

"IT," Gens concluded, "is the underwear for business services."

Not very glamorous, is it, being in charge of the business's skivvies? The *CIO* title, one might hope, would put one in a more exalted position. Maybe being in charge of the business's ties or suit jackets. But, according to Gens, and according to our cover story, "Get Smart About SaaS" (Page 28), thinking of oneself as a provider of business services is a lot more promising—and leads to a brighter future for CIOs—than thinking of oneself as a bulwark and guardian of the enterprise's infrastructure. That, CIOs seem to agree, is a career dead end.

Of course, one must be realistic. "Get Smart About SaaS" does not buy in to the hype that any business function in any size enterprise can be handled through a SaaS delivery model—and, indeed, adoption rates, while growing, are still relatively low. "Don't expect something unique. If you need everything customized, you won't have success with SaaS," says Lloyd Hohenstein, VP for finance, human resources, real estate and corporate communications at Schwab Technology. But then again, do you really need something unique? "No one's going to care who you're using for payroll or Web conferencing, or even office productivity applications," says Martin Perry, CIO of IT staffing firm Sapphire Technologies.

What's interesting to me is how quickly SaaS talk—IT talk about software and applications, integration and security—turns into business talk, talk about business processes and adding value to the enterprise.

That is the conversation CIOs need to have, and that, increasingly, is the conversation they are having. Are you?

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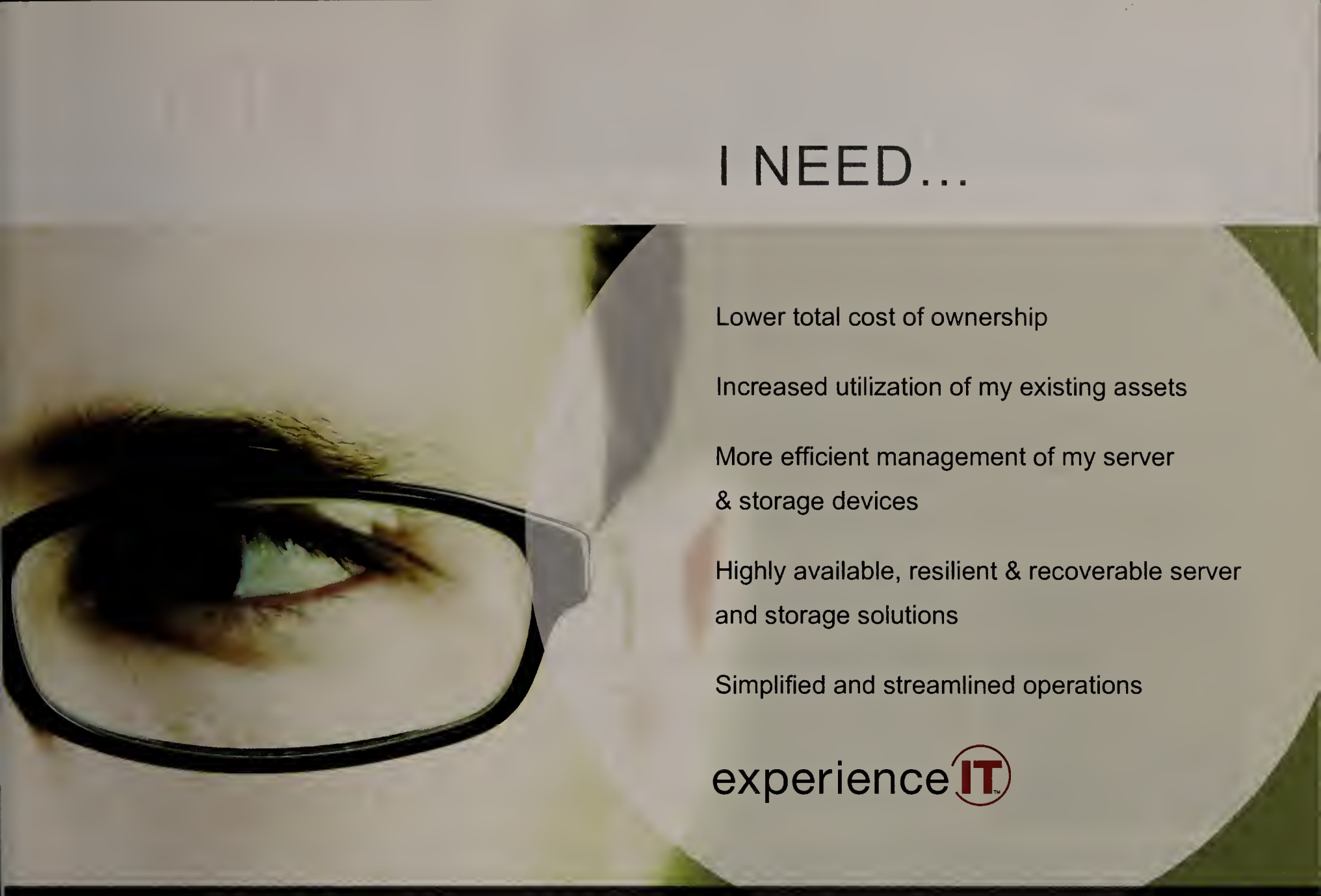
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FROM THE PUBLISHER

How Social Are You?

Doing business today means connecting with everyone



As I prepped for a recent panel on CIOs and social networking, I had a brainstorm. (Well, maybe it was a light drizzle.)

If business today is all about interaction (facilitated by the Web and its attendant technologies), it makes sense to add four new (and somewhat nonintuitive) acronyms to the e-commerce alphabet soup: C2C (consumer to consumer), P2P (prospect to prospect), C2P (consumer to prospect) and C2B (consumer to business).

(While the twentysomething Web 2.0 crowd likes to think it coined the phrase *social networking*, it didn't. *The Cluetrain Manifesto: The End of Business as Usual*, published way back in 1999, is for many of us the seminal work on the economic impact of the IT-connected marketplace.)

Last month the Pew Research Center added to the growing body of work on social networking by releasing a report that identifies 10 types of Net users. Among others, they include "Omnivores," who consume information, goods and services at a high rate; "Mobile-Centrics," who are strongly attached to cell phones and mobile applications; and "Indifferents," who have a fair amount of technology at hand but do not allow it to play a central role in their daily lives.

So what's the big deal about social networks, new acronyms, Omnivores and Indifferents?

The big deal is this: As your firm continues to drive a growth-and-innovation agenda, your customers and prospects ultimately will determine the degree to which you succeed. So CIOs need to ask themselves, Is my infrastructure sufficiently robust to encourage and support social networking among customers and prospects?

As they say in New England, customers are "wicked smart." They know what they want, they know how to get it, and they're doing so by leveraging the power of social networks to reach out to vendors, other customers and prospects.

It's worth reading the Pew Research report. You can find it at www.cio.com/article/109302 or send me an e-mail and I will forward the PDF of the report to you.

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trendlines

EDITED BY LAURIANNE McLAUGHLIN

NEW * HOT * UNEXPECTED

One Single Version of the Truth

MDM Master data management, or MDM, is quietly sneaking up on SOA as the most overused IT buzzword—though vendors have yet to agree on exactly what MDM means.

Currently being pushed by a plethora of BI, data warehousing and CRM vendors, among others, MDM boils down to this: a set of technologies to help enterprises better manage data flow, integrity and synchronization, plus a governance mechanism for enforcing data policies. MDM offers a tantalizing prospect: a “single version of the truth,” acquired from vast databases of internal assets, says James Kobielus, principal analyst for data management at Current Analysis.

Early MDM acolytes say the transformation is a brutal combination of bridging technological silos and brokering accords between corporate turfs.

At Wachovia, Senior VP Rick Koch-

Continued on Page 12



SNEAK PEEK: High-Powered Notebooks, 2008

MOBILE What will they put in notebook PCs next? At Intel's recent Developer Forum conference in Beijing, the company revealed it's working on quad-core processing “to go.”

Set for release in 2008, the quad-core mobile processor is aimed at high-level gaming and mobile computers, where users will trade battery life for more performance. While the most demanding users (including gamers and those doing video editing) always want more processing power, this chip won't appear in standard business notebooks for some time.

“You'll see it at the high-end, but I don't see it running so fast into the

mainstream because I don't believe there will be enough threaded applications that will justify the trade-offs,” says Mooly Eden, vice president and general manager of Intel's mobile platform group. (Multithreaded applications allow several parts of software code to be executed simultaneously, taking advantage of multiple processing cores.)

The quad-core mobile chip will likely differ in some way from Intel's current desktop and server quad-core chips, which strap together two dual-core dies inside a single-chip package.

Meanwhile, the next version of Intel's Centrino notebook platform, code-named Santa Rosa, hit the

market last month. Compared with Centrino, Santa Rosa offers several improvements, including dynamic acceleration, which raises the clock speed of one processor core above the guaranteed frequency level when the other core has powered down.

This raises the performance of the remaining core, while keeping the processor operating within the thermal limits envisioned by Intel engineers. This differentiates Dynamic Acceleration from overclocking, where users raise the frequency of a processor beyond the intended level.

—Sumner Lemon and Steven Schwankert

Krugle It, to Find Open-Source Code

SEARCH Krugle aspires to be the Google of software code search, even referring to itself as a verb. And recently, Krugle has started to become the go-to search site for open-source developers, partnering with key websites, including SourceForge.net, the leading repository for open-source software projects, to embed Krugle search. Krugle also announced a similar partnership with CollabNet, a community of 1 million developers.

Cofounder and CTO Ken Krugler says Krugle soothes a pain point for developers: They spend 25 percent or more of their time searching for lines of code to perform certain functions that may already exist. There's no sense in writing code that's already been written, says Krugler.

How does Krugle simplify code search on SourceForge? Developers typically visit SourceForge to find a project similar to the one they're doing. But they end up having to download the whole project. Krugle lets them search through the project to see if it fits the bill without downloading it entirely.

Krugle gives software developers one thing they need most—time—says John Andrews, CEO of Evans Data, a research firm.

"If you could shave 10 percent of that [search] time off, that is a huge productivity improvement either in costs savings, revenue generation or just spare time," Andrews says.

Google is still the first stop for many open-source developers, but as the volume of open-source code grows, as companies use more open source for development internally, and as more software companies open their previously proprietary code, Google may not be able to keep up, says Andrews.

Krugle's next venture will be search for open-source development within enterprises: An enterprise product currently in beta is slated for general release in the second half of 2007.

—Robert Mullins

The Truth

Continued from Page 11

har's risk information strategy group is pursuing an MDM strategy to unite the disparate data in its four core divisions—corporate investment banking, wealth management, capital management, and retail and commercial banking. Kochhar's first mission: Prepare the company for Basal II compliance (the regulation, taking effect in two years, that requires banks to keep a three- to seven-year history of data). Wachovia will use Basal II as a springboard to unite its customer data. "If we just manage it as a compliance project, we won't get any business benefits later," Kochhar says.

Wachovia is taking a phased approach to addressing the daunting cultural, business process and technology components of the MDM change. Kochhar has his work cut out for him: Wachovia, with \$706 billion in assets, has completed 90 mergers during the past several years.

One challenge is reconciling the differences between Wachovia's and the merged companies' data definitions. "Folks are easily able to articulate the technology components to get there," Kochhar says, "but they have a much harder time with business processes and culture issues."

To ensure a smooth transition, Wachovia formed a risk data council (including prominent IT leaders), which has the final say on enterprisewide data disputes (how data sets are named or defined, for example). The company created data steward roles deeper down in each business to facilitate day-to-day decisions. Solving disputes early with established governance controls can save millions, since reconciliation costs add up quickly, Kochhar says.

His advice for others beginning MDM planning? "Don't start with the technology as the centerpiece of the solution. Start with corporate strategy."

—Thomas Wailgum

The E-Mail BLACK HOLE

Think you're immune to the problem of "lost" e-mails? A recent survey of employees at midsize and large U.S. companies suggests that the White House, currently catching some heat for lost e-mails, is not the only organization failing to lock down messages that may be needed in a court case. Personal e-mail is sneaking through the cracks.

33%

of employees use personal e-mail accounts at least once or twice a week for business reasons; 17% of those do so daily.

16%

use their personal e-mail to avoid corporate review or retention of their messages.

60%

use personal e-mail to conduct business when their corporate e-mail system goes down.



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How to Get Six-Pack Margins

PRICE OPTIMIZATION B2B manufacturers have long used a “cost plus” pricing model: Figure out what it costs to make the product, then mark it up by a fixed percentage. But now some IT leaders, like Pat Quinn, Acuity Brands Lighting’s VP of information systems and technol-

ogy, are helping their companies dump cost plus, and beef up margins and revenue using a little-known tool—price optimization software. In fields such as manufacturing, chemicals and distribution, this software—provided by vendors including Zilliant, PROS, Vendavo and Rapt—helps companies drive typical margin gains of 10 percent and profit enhancements of 15 percent or more, according to Gartner data.

Travel companies have priced this way for years. But it’s a big change at manufacturing firms like Acuity, which became concerned with price erosion about three years ago. Acuity gained some valuable insight from a consultant study, Quinn says. However, “From an IT perspective, it wasn’t repeatable.” This led him to Zilliant’s software. Note that Acuity’s business side approached IT to find a tool; Quinn doesn’t think IT could drive a pricing effort.

Using Zilliant tools, Acuity can improve prices and craft the best bundles of options, Quinn says.

Acuity’s operating profit margin has grown from 7.4 percent to more than 12 percent in the past two years. “A significant contributor has been our ability to price appropriately,” Quinn says. (For more details, see “A Secret Weapon to Drive Top Line Revenue,” [advice.cio.com/blogs/inside_tech.](http://advice.cio.com/blogs/inside_tech/))

—Laurianne McLaughlin

ogy, are helping their companies dump cost plus, and beef up margins and revenue using a little-known tool—price optimization software.

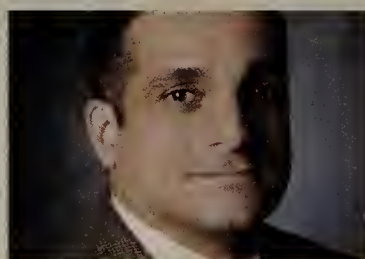
Because pricing is such a closely held strategy, many firms don’t want to even confirm using this software, which is typically based on statistical modeling techniques. It

TRENDLINES

When Moving Up Is a Bad Fit

ON THE MOVE For many IT executives, the CIO title isn’t the end-all and be-all; they aspire to executive roles like COO and CEO. But upon reaching that coveted other “O” position, some longtime CIOs conclude they’re not cut out for it. They realize that their new job isn’t so glamorous, or that the CIO job wasn’t so bad. So they return to the CIO role. And that’s A-OK, say recruiters.

There’s no shame in trying on a role that doesn’t work out, says Sam Gordon, CIO practice director at executive



Joseph DeTullio

search firm Harvey Nash, unless, of course, you’ve very publicly failed in your new post. “People respect you more for trying something out and having battle scars to show for it than for not trying something new,” says Gordon. “It’s the old adage ‘Anything that doesn’t kill you only

makes you stronger.’”

Two longtime CIOs who had moved outside of IT recently became CIOs again:

David Guzman, the former CIO of Owens & Minor, started at Accretive Commerce in April, after serving as Yankee Group’s chief research officer.

Joseph DeTullio joined media and entertainment industry conglomerate IMG in April, after serving as CEO for EquaTrax, a company that provides royalty processing services to the music industry. (Before that, he held CIO roles with Universal Music Group

and The Seagram Co.) Commenting on his return to the CIO role, DeTullio says his CEO role didn’t turn out to be such a big transition. “I went from a CIO role at the world’s largest music company to the CEO role at a startup joint venture that had one purpose: to build a royalties platform for the entertainment and music industry. It wasn’t that big of a change for me. I wanted to move back into a position with a global business and a broad scope of responsibility.” You can’t fault him for that.

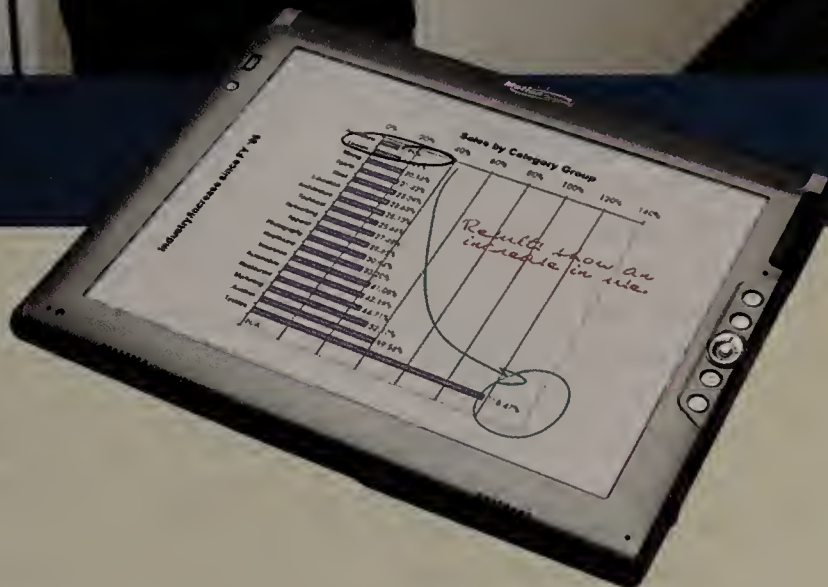
—Meridith Levinson

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BY **JUAN CARLOS PÉREZ**

Vendor Manager

job description A vendor manager orchestrates the IT department's dealings with its suppliers, such as makers of hardware and software and providers of services. The vendor manager guides the purchasing of products or services for the department. This includes evaluating a potential provider's reputation, resources and expertise, as well as helping with negotiations and contracts. Large IT departments may need a vendor management office, not just one person. This is often necessary when an IT department has varied and complex contracts with outsourcers, both in the United States and abroad, says Christine Bullen, a professor of IT management at the Stevens Institute of Technology in Hoboken, N.J.

as ask for references from internal staffers.

what to look for:

A candidate must be a great negotiator, a very good listener and highly analytical. The ability to be personable and tenacious is also key to the position. "You have to know how to deal with people and make evaluations based on what's right instead of what you like," Bullen says.

elimination

round: Ask candidates to describe how they would choose a vendor if they have three that are similar. "I'd want to know their thought process and make sure they have my organization in mind not only today but in the future as well," says Gabrielson.

growing your

own: Since it's best to fill this position from within, CIOs are advised to persuade a top manager that this is a good career step, Ambrose says. By becoming an expert in IT sourcing, the person climbs closer to a senior role: Ambrose knows of a vendor manager who moved up from the job to head the company's application development efforts.

why you need

one: Centralizing vendor management gives the IT department a broad view of its agreements with suppliers and the ability to obtain better terms and prices. "With their broad knowledge, vendor managers can negotiate on behalf of the IT organization and make sure it is getting the best value," says Greg Ambrose, managing director of Catalyst

Search Group, a technology recruiting firm.

Without a vendor manager, an IT executive may not know that a colleague is also purchasing from the same vendor, says Brian Gabrielson, national practice director at Robert Half Technology, an IT staffing and recruitment firm.

"You gain efficiency if you centralize these tasks on a vendor manager," he says.

Vendor managers ensure that IT purchases support the company's business objectives. They also bring an unbiased opinion to evaluating suppliers, which can balance the emotional attachment some IT executives develop for certain brands. Finally, the vendor manager is aware of the company's policies for dealing

with suppliers, as well as legal and contractual best practices.

desired skills:

Senior IT professional with at least 10 years of experience. Broad understanding of IT. Experience with software licensing, hardware procurement and outsourcing agreements. Ability to manage virtual, geographically dispersed teams.

how to find one:

Ideally, the right candidate is already working for the organization, says Ambrose. "This person would have already demonstrated the necessary ability, success track record, right attitude and communication skills," he says. CIOs should also reach out to headhunters, as well

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THE BUSINESS CASE FOR VIRTUALIZATION

RESEARCH VALIDATES MIGRATION AND REVEALS EXECUTIVES' VIEWS OF ASSOCIATED CHALLENGES

Many technologies are a luxury—until they demonstrate real business value. Then they become a necessity.

“Virtualization has made the leap,” says Gerard McGowan, vice president of corporate strategy for Edison, N.J.-based technology integrator, Innovativ. “It’s now more defined, refined, and addressing a variety of business challenges.”

Virtualization promises considerable value—which has CIOs taking action. But its implementation is sometimes easier said than done, due to technical complexities and deficiencies in skill sets.

IDG Research Services recently queried IT executives about virtualization in today’s enterprise, and discovered some telling revelations.

KEY FINDING:

There is a strong migration toward virtualization.

According to the survey, virtualization is more than a mere IT luxury. Its applications are plenty and its value tangible. Indeed, nearly three-quarters of the respondents say they are deploying or planning to deploy

virtualization technology within the next 12 to 18 months.

Investments in virtualization appear to be divided among several key areas.

About half of virtualization invest-

ments are allocated to servers while a quarter go to storage. A smaller percentage is earmarked for applications and the enterprise data center. “Interestingly, corporate managers assign higher ratings to storage, applications and enterprise virtualization than do IT professionals, suggesting that such investments have a greater visible impact on the business than server initiatives,” says McGowan.

KEY FINDING:

Lower TCO is driving virtualization.

Lower total cost of ownership is the top benefit expected from virtualization, cited by 62 percent of respondents. Cost reduction and avoidance stem from many sources, including fewer machines, reduced floor space, lower power and cooling demands, and improved efficiency.

“But some of the other harder-to-quantify benefits of virtualization yield a greater long-term return,” says McGowan. These benefits are ranked relatively consistently in terms of importance: streamlined operational

efficiency, flexible development and testing environment, increased business agility, improved system reliability and availability, and greater disaster recovery/business continuity capabilities.

KEY FINDING:

Virtualization implementations sometimes have their challenges.

While 5 percent of respondents rate their virtualization experiences to date as difficult or very difficult, the majority call the experience only somewhat difficult. Specifically, respondents point to a lack of necessary skills, complex technology and costs as the top barriers to implementing virtualization.

“It would be a shame if such artificial barriers were to hold companies back, as such skills can be easily rented,” says McGowan. “Maybe the real barrier is that enterprises simply get in their own way.” That is, internal processes and procedures may not be set up to deal with virtualization. What’s more, many CIOs get caught up in their own loop of immediacy—too focused on tactical business needs to seriously consider strategic initiatives like virtualization.

KEY FINDING:

There are important benefits in having partners play a critical role in virtualization strategies.

Respondents resoundingly report that partners play an important role in virtualization. Specifically, VARs are most likely to be engaged in the evaluation and selection of virtualization solutions (45 percent), implementation (44 percent) and infrastructure design and planning (42 percent). Increased deployment speed, reduced complexity, additional staffing requirements and cost reductions—which help eliminate some of the barriers to adoption—are the top reasons to turn to VARs.

“Let your partner do the heavy lifting so you can focus on strategic initiatives that directly impact your business,” concludes McGowan.

To learn more about trends, scenarios and concerns about virtualization, go to www.cio.com/whitepapers/innovativ now to obtain a free download of the full white paper, which includes further results and commentary.

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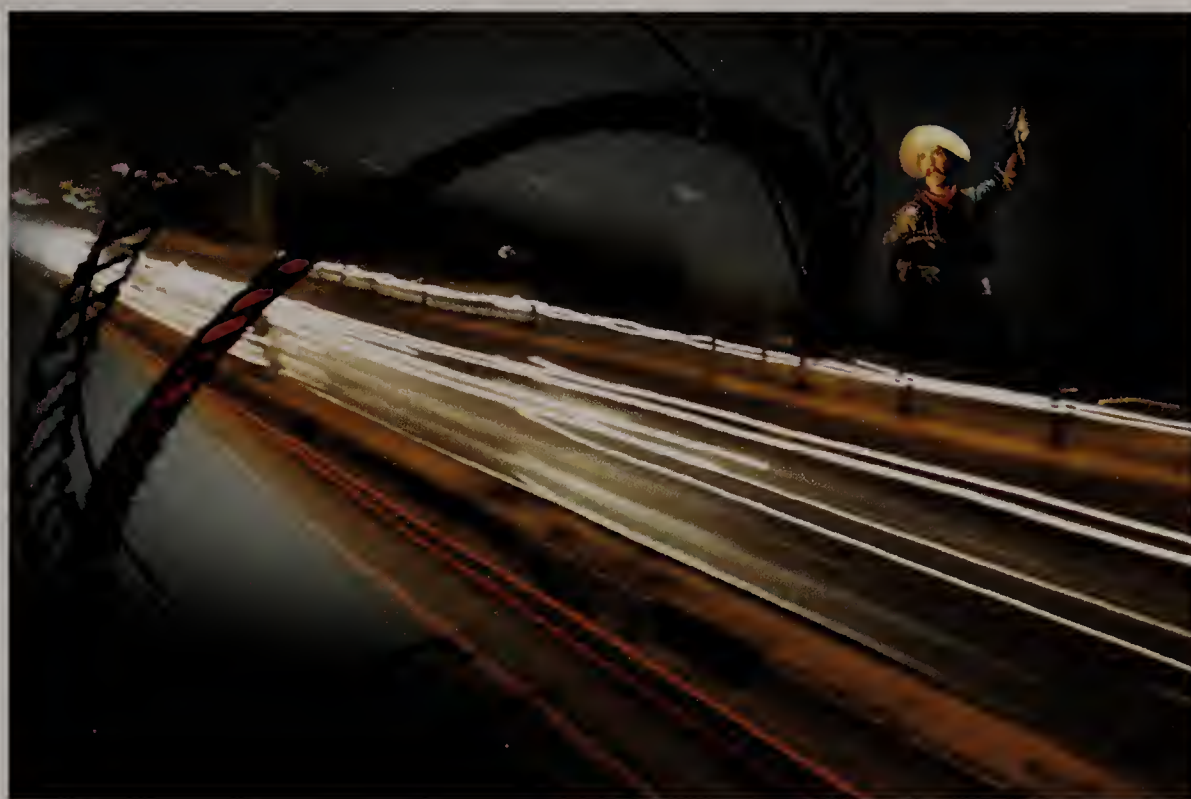
Respondents resoundingly report that partners play an important role in virtualization.

ESSENTIAL

FROM INCEPTION TO IMPLEMENTATION—I.T. THAT MATTERS

technology

Edited by **Laurianne McLaughlin**
lmclaughlin@cio.com



Roping Telecom Chaos

BY GALEN GRUMAN

COMMUNICATIONS | When Craig Haught signed on as VP and CIO for lithographic equipment manufacturer Cymer in June 2006, he learned the nasty truth about telecom: No one was really in charge. There was no strategy in place to ensure that costs were controlled, that inventory was managed and—perhaps most critically for the CIO—no way that IT could develop and deploy effective strategies involving telecommunications.

It's a huge issue, yet nearly two-thirds of companies—65 percent—don't have a handle on their telecom expenses or inventory. And almost half have no way to automate the management of telecom assets, according to Aberdeen Group research.

"Enterprises have a very disjointed process for managing telecom, often with an inadequate understanding of their processes and goals," says Joe Basili, a research director at Aberdeen Group.

To corral this telecom chaos, enterprises have been shifting responsibility for telecom to the CIO. In fact, Aberdeen's surveys show that 64 percent of enterprises have moved telecom into IT's purview in recent years. (The finance department handles telecom expenses at 20 percent of companies, operations handle them at 11 percent and other groups handle them at the rest.)

What do you need to know as CIO as telecom moves onto your plate? For starters,

Most companies mismanage telecom expenses and planning—and are now asking the CIO to fix the problem. Here's how to take stock and clean up the mess.

you'll want to think bigger than budget. Certainly, you can realize cost savings by managing telecom adroitly: Telecoms typically overcharge companies by 5 percent to 10 percent, analysts say.

"But I don't want to just count beans," says Cymer's Haught. "I want to develop a catalog of services and provision better services," he says.

Joel Wiens likewise took on a fragmented telecom environment at his company, hair salon franchisor Regis, where he is VP of IT. "No one had the whole picture," he says. "But I saw telecom as an extension of what we're doing in IT, such as managing point-of-sales data."

Among the hurdles, effective telecom management requires an understanding of the contracts, bills and service-level agreements; the resources to manage the inventory of devices and lines internally; and the expertise to manage support and billing issues with the carriers. "It's an administration-intensive job," says Haught.

That's why most enterprises look to hire an outside firm to help manage telecom services. And before they can do so, they have to get their internal house in order, Basili warns. Haught faced this dilemma: As with poorly designed, or "spaghetti," code, Haught couldn't tell where one thing began and another ended in his company's telecom, or understand the logic.

Unravel Your Internal Mess

Telecom management processes are fragmented at most companies for historical reasons. Voice and data used to be entirely separate, both at the carriers and within enterprises, says Aberdeen's Basili. It used to be common to have a telecom department that handled phones, while IT handled the network. And billing was typically scattered regionally, because local phone service came from a local telco, while a sep-

arate national company would handle long distance. That began to change with the rise of remote access connectivity, the Internet and VoIP, all of which disregard any difference between voice and data lines.

But to get a handle on telecom expenses—and ultimately on telecom strategy—an organization needs to assemble six areas (sourcing, procurement, invoice reconciliation, inventory management, analysis and reporting, and payment) and manage them together, Basili says.

"Everything in the telecom lifecycle is interrelated. If you focus on just one or two areas, you'll have leakage in the other areas that will more than eat up any savings," he says.

Without overall operational control and insight, functions within an organization can work at cross-purposes, notes Charlotte Yates, CEO of the telecom expense management consultancy Telwares. She recalls one client that renegotiated its telecom contracts and changed its supplier mix to reduce costs, unaware that IT was setting up a data center in another region. The contracts didn't account for the high-availability lines needed for that data center, which happened to be located in a region that the chosen carriers didn't serve. The result: The company lost all its negotiated savings by having to pay for expensive lines from another provider.

Any attempt at telecom expense management also needs to be in the context of telecom strategy, Basili notes. For example, if an organization expects to migrate significantly to VoIP, its carrier contracts need to avoid penalties for reducing the number of phone lines used in the future.

Most organizations negotiate based on their current mix, seeking economies through pooled minutes and volume discounts for maintaining a certain number of lines—and miss the fact that when those conditions change later, the carrier contracts impose penalties, like higher costs for excess usage, Basili says. "You really want strategic advice on how to structure your contracts to anticipate changes," says Ron Rose, CIO of Priceline.com, who uses

TOOLBOX

Cost-Cutters

Among the more than 120 telecom expense management vendors, only about 30 cover the whole gamut of needs, says Joe Basili, research director at Aberdeen Group. CIOs will find three basic approaches:

Licensed software. You run the bill analysis and inventory management software on premises. The vendor provides the normalized billing data from all your carriers so you don't have to manage its translation to the analysis tool's standard, and you can tap into the vendor's pricing database to analyze your costs versus industry norms. Providers include AnchorPoint, Asentinel, Avotus, MBG, MDSL, Paetec, Quickcomm, Rivermine, Symphony, Tangoe and UTR Global.

Joint management using on-demand software. The vendor hosts the software (instead of just handling the data), customizes reports and handles routine analysis, so you can focus on exceptions to your billing expectations, service-level agreements and provisioning plans. Main players are the same firms noted above for licensed software.

Managed service. The vendor handles everything except the payment approval, although you have online access to the vendor's data and reports for monitoring and analysis. The main choices are AnchorPoint, Avotus, Cass Information Systems, Control Point Solutions, MBG, Profit-Line, Symphony, TnT Expense Management, UTR Global and Vercuity. Mid-market specialists include Amtel, Broadsource, Comstructure, Creative Cost Management, Invoice Insight, MTS, ParseLogic, and Tele-Razor Technologies.

—G.G.

Telecom Tips

For more advice on trimming telecom spending, see **UNTANGLING TELECOM** at www.cio.com/article/19050.

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“We didn’t know how to negotiate all the telecom contracts. They are the most complex we’ve seen.”

—Joel Wiens, VP of IT, Regis

TnT Expense Management to manage his telecom services and advise on contracts.

Bringing all these pieces together requires a CIO to navigate the various fiefdoms and start to orchestrate them, Basili says. Once CIOs can coordinate the various activities, they can begin to understand the actual needs, usage patterns and processes involved with telecom, he says. At that point, the CIO can bring in the tools or services needed to both manage telecom expenses and plan a strategy for telecom directions.

At Cymer, for example, says CIO Haught, “we’re still trying to work out some of the basic strategies, and we need to get down to data for that. Once we have a sustainable operation, we can push further into managed services.”

To help figure out his current telecom landscape, Haught hired telecom expense management firm Avotus as a consultant. Regis’s Wiens did the same, hiring American Business Communication to figure out what was already in place.

Choosing Outside Help

With their internal telecom house in order, CIOs can face the next challenge: finding the right technology and services to manage telecom expenses and assets. That’s not simple. You can currently choose from more than 120 vendors and as an industry, these companies are as fragmented as the enterprises. The industry started with billing management, helping accounting payables groups manage invoices, and in some cases, supporting contract negotiation. But that billing focus is misplaced today, says Elisabeth Rainge, a director at IDC (a sister company to *CIO*’s publisher). She recommends that CIOs look at telecom expense vendors that also offer management and analysis services. “A focus

on management pays off more for IT since it aligns [telecom approaches] with business goals,” Rainge says.

Today, only about 30 of the telecom expense management providers handle that full range of telecom services, covering at least the first five parts of Aberdeen’s six-stage telecom lifecycle, Basili says.

Before diving into the pool of vendors, CIOs should figure out which of three deployment models best fits their enterprise’s culture and resources, says Kathleen Adams, a research director at Gartner. Those models are do-it-yourself, joint management with a vendor, and complete outsourcing.

Complete outsourcing is most popular, followed by joint management. Least popular is the self-service approach, in which the enterprise installs telecom management software and relies on a vendor only for delivering regularized bill feeds from the carriers, Basili says, because this requires the most in-house resources. (In all models, you have access to billing data and analysis, and sign-off on payments.)

Regis’s Wiens uses the complete-outsourcing model for his voice lines, because it would be too costly to develop the internal resources to manage them. (He has very few data or cellular lines, so his group manages those internally.) Thus he used American Business Communication to inventory the telecom equipment in place, figure out what services were necessary and unnecessary, recommend a consolidated set of providers, and negotiate the contracts, saving approximately \$5 million during the past five years. “We didn’t know how to negotiate all the contracts with each of the telecoms. Their contracts are the most complex we’ve ever seen,” he says.

Al Etterman, CIO of optical technology manufacturer JDS Uniphase, takes

The average Fortune 500 company fails to manage **\$61 million** in telecom expenses.

SOURCE: Aberdeen Group

the joint management approach. “My carrier relationships are with sales; theirs are with operations,” he notes. He relies on his vendor, Telwares, to analyze and propose telecom service mixes, contractual terms, service-level agreements, financial terms and billing management when it’s time to negotiate new contracts. “I manage [telecom] at the service level, not at the tactical level,” he says.

Bonus Tips: Finish Smart

Do not assume that the consolidation of carriers will make expense management easier. “The carrier billing systems are just a mess, and it has only gotten worse with consolidation,” says Gartner’s Adams. Contracts also remain complex, because carriers’ internal divisions remain largely uncoordinated, she notes.

The complexity of telecom management is often daunting. “I often get calls from CIOs saying, ‘I don’t want to be doing this anymore,’” Adams says. But until you untangle your telecom “spaghetti,” you won’t be able to hire a telecom expense management vendor to take it off your plate—and keep it off. **CIO**

Galen Gruman is a regular contributor to *CIO* magazine. You can reach him at ggruman@zangogroup.com. To comment on this article, go to www.cio.com/article/109703.



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You can make a big difference in someone's life with very little effort on your part. This is the secret sauce behind the success of the coaching profession. With only an hour every week or so, coaches impact lives and receive accolades out of proportion with the depth or breadth of the relationship. Exhibit A: An e-mail received from an executive with whom I spent 15 hours over six months working on team-based coaching.

"I often remember the leadership 'experience.' It really changed my life. I feel I have adopted a more confident style of leadership, and it is delivering results for me and those who surround me."

Although I love my job and the kudos, I think it's sad that companies have to look outside their walls for help in fulfilling some of the fundamental needs of their workforce, such as helping individual workers identify and achieve their long-term goals. Outsourcing care and concern isn't the ideal approach for meeting these needs. They are best provided for by those who are close at hand. It is for this reason that I always encourage my clients to pay it forward: to understand my coaching techniques and apply them to those they are entrusted to lead.

For those of you who are inclined to take on the role of a coaching leader but are uncertain as to approach or time requirements, let me dispel a couple of myths, offer a caveat and provide some encouragement.

Myth 1: Coaching is a specialist skill that takes years of practice. In reality, if you are a parent, you already know the fundamentals of coaching. Most leaders have kids and thus are practiced in the art of helping others anticipate consequences

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and reflect on outcomes to make better decisions in the future. Coaching leaders, like parents, also help others recognize their talents. They foster the accumulation of knowledge and the development of abilities to achieve goals that are important to the individual and provide value to the organization.

To encourage growth, coaches establish clear standards, define stretch goals and celebrate accomplishments. They also create "space" in the form of increased authority and delegation around the individual to encourage creativity, initiative and risk taking.

Myth 2: Coaching takes too much time. Rest assured that coaching isn't a distraction from getting work done. Rather, it's a fulfilling and productive way to get individuals working in concert with the needs of their team and organization.

Coaching should be applied within the context of the work that's "on the desks" of your staff. And here's the caveat: Before you can coach someone, you need to secure his or her trust. The coaching leader can do this by understanding a person's values, motivators and personality. This information can be gathered in a couple of hours. You can also get a sense of a person's skills and abilities through delegating and observing. With all this intelligence, it is now possible to identify developmental opportunities and align this person with the work that needs to get done.

From a distance, it's hard to spot the difference between a coaching leader and a task-oriented one. Both follow a process of delegating and following up. Task-oriented leaders delegate based on the needs of the organization and follow up to ensure the work gets done. Coaching leaders do the same but also ensure that individuals understand what they are supposed to learn. In the process of following up, they make sure that the right learning occurs—particularly when setbacks are experienced.

However, not everyone has the emotional intelligence, character or motivation to coach. Many leaders are too narcissistic to muster up the emotional energy to establish the rapport and trust necessary to make coaching relationships click.

The key to successful coaching is the ability to empathize with others. Empathy requires quieting your mind so that you can tune in to someone else. However, it's impossible to tune in to others when one is overscheduled and unable to give her undivided focus to another human being for a half hour or more.

People find meaning in connecting with others. When you make a difference in someone else's life you are enriching your own. Imagine receiving this e-mail: "Thanks so much for the advice on my business. I believe that someday, everything that I know will equal everything I think I know...and magic will happen."

I spent a total of two hours with this guy. Imagine the impact you can have by coaching the people you interact with on a daily and weekly basis.

Reader Q&A

Q: I'd like to take on the role of a leader-coach but have no experience doing this. What resources are out there to help me get started?

A: There are a lot of resources to support leaders who want help in learning how to include coaching in their leadership repertoire. One of my favorite easy reads is "Leader As Coach: Strategies for Coaching & Developing Others," by David B. Peterson and Mary Dee Hicks. This pamphlet does a great job discussing the coaching process, emphasizing the respective roles for the coach and the coachee.

If you learn best through listening and immersion, register for a coaching course such as those offered by Linkage (www.linkageinc.com) or the American Management Association (www.amanet.org).

Q: How far down the ranks does this idea of coaching leadership extend?

A: Invest your coaching to be in line with where your organization will get the greatest return. Coaching is not for everybody. Some people don't respond to coaching, particularly those who lack the motivation, either due to complacency or lack of attention to personal development. As cold as this may sound, allocate your time to individuals who have the greatest potential to impact the performance of your organization. Using these two parameters, it's possible to identify your coaching target group and invest your time accordingly.

Q: What suggestions do you have for making sure "the right learning" takes place after coaching?

A: Make sure that you help individuals identify and sequence their developmental experiences to ensure that they are presented with challenging experiences at the right time in their

career. As they face these challenges, you can make sure that "the right learning" takes place by meeting with them on a regular basis to force the self-reflection necessary to extrapolate the larger meaning and implications of their experiences. **CIO**

Have a Leadership Question?

For more reader questions and answers from **SUSAN CRAMM**, go to www.cio.com/author/102853.

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Susan Cramm is founder and president of Valuedance, an executive coaching firm in San Clemente, Calif. You can e-mail feedback to susan@valuedance.com.





INNOVATION, NOT INFRASTRUCTURE

CIOs CITE REDUCED COSTS, IMPROVED IMPLEMENTATION TIMES AS BENEFITS OF ON-DEMAND

Companies don't want to invest in information technology merely to retain the status quo. IT must fuel innovation so that business can respond to new opportunities and adapt to changing requirements. Too often, however, most of IT's resources are bound up in the rote exercises of maintaining hardware, patching software, tuning databases and running backups.

Enter on-demand solutions that let customers offload these infrastructure headaches. IT organizations are now looking for opportunities to extend the on-demand model as a platform for building next-generation business applications, as well as customizing existing applications that are delivered as services.

A recent IDG Research Services survey reveals that the top three benefits of the on-demand model are improving implementation times, reducing costs and allowing IT to focus on strategic innovations.

Read on to discover how on-demand is helping companies innovate.

THE STRUGGLE TO INNOVATE

In the IDG survey, more than half the respondents say their companies spend too little on innovation. By removing concerns about hosting and maintaining

the functionality of existing on-demand applications, such as customer relationship management (CRM), without coding. Those vendors that enable companies to build entirely new and sophisticated on-demand applications will emerge as the go-to business partners for enterprises that want to make innovation, rather than infrastructure, the priority.

"Enabling developers to shift all of their focus to actually building rich business application functionality delivers massive productivity gains to the entire IT department," says Ariel Kelman, senior director of platform product marketing at salesforce.com, the leading on-demand IT provider, with 29,800 customers and 646,000 subscribers worldwide.

PERCEIVED HURDLES

With every new release, users have to go back and recode the custom application. It's important that on-demand providers distinguish themselves with platforms that preserve customizations across releases. Salesforce.com's multitenant architecture, for example, is designed to enable all customizations and integrations (whether they're configured or coded) to upgrade automatically without any effort on the part of the customer.

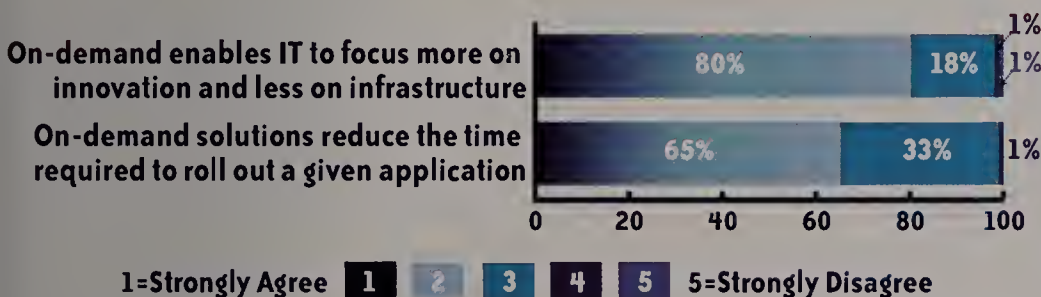
Additionally, open Web services APIs play a critical role in ensuring that on-demand platforms can be easily integrated with both on-premise applications such as enterprise resource planning (ERP) systems and business Web services such as ADP and Hoover's, says Kelman.

As the industry evolves to enable companies to efficiently roll their own on-demand applications while running them off-site as services, IT departments will be able to create sophisticated applications much faster, change them on the fly and drastically cut the time it takes to get things done.

In short, rather than being mastered by their infrastructures, IT will at last have an opportunity to master innovation.

ON-DEMAND ENABLES IT TO FOCUS MORE ON INNOVATION

Q: Please rate your level of agreement with the following statements.



Source: IDG Research Services Study, March 2007

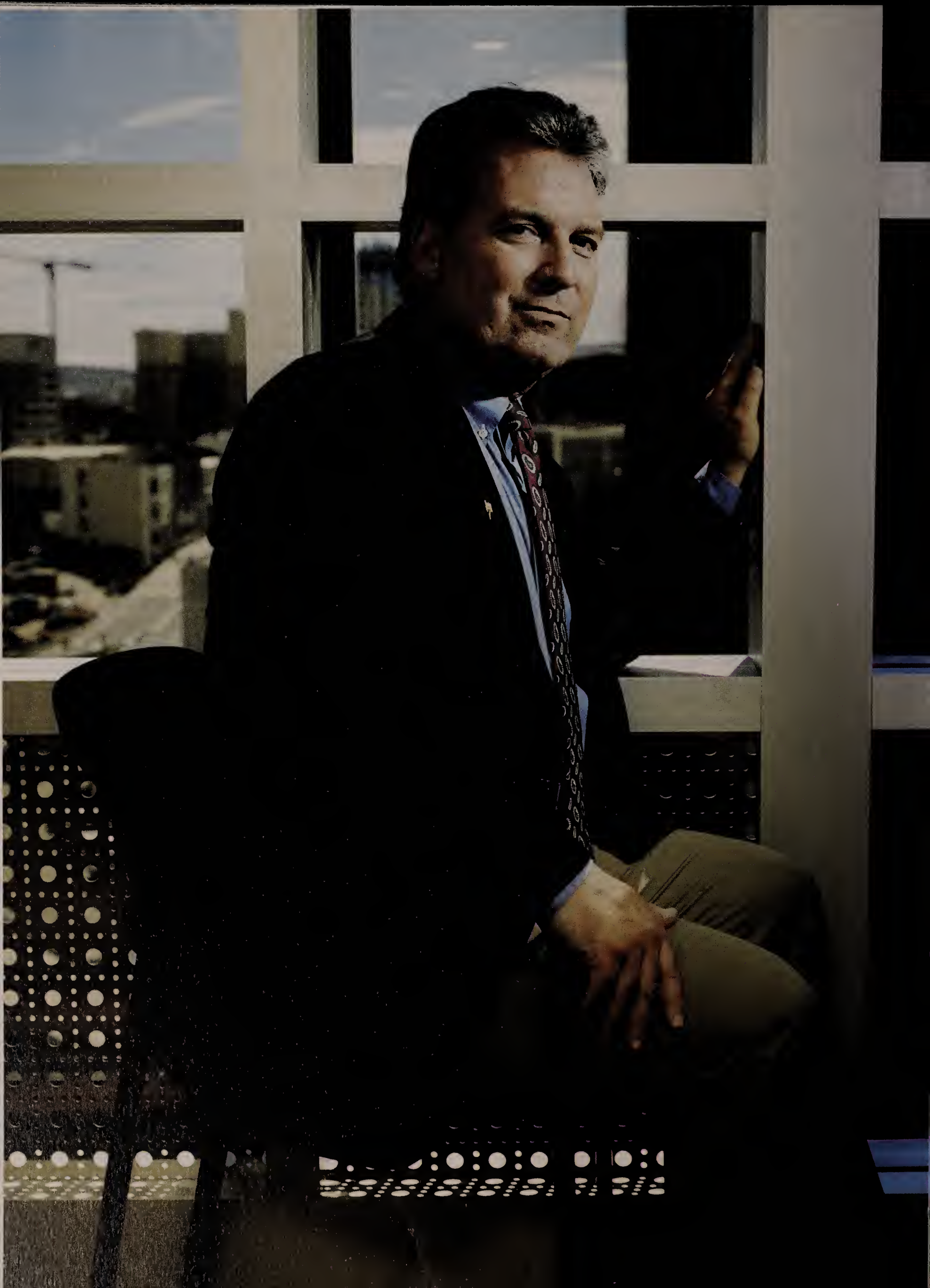
the server infrastructure that supports an application, on-demand offers organizations speedier, more cost-effective deployments. In fact, six out of 10 survey respondents say quick deployment times and the need for cost-efficient solutions are triggers for their current use of on-demand.

Companies also need on-demand IT solutions that make it easy to create robust new features and extend

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Vendors say software as a service will cut costs and increase efficiency. They say it's enterprise-ready. Does that sound too good to be true? It is.

BY GALEN GRUMAN



"What if we created a utility for enterprise automation? Then you don't have to create a data center! Then you don't have to have a CIO!"

That was Salesforce.com CEO Marc Benioff in June 2003, selling the benefits of the then-new concept of software as a service (SaaS).

Fast-forward four years, and Salesforce.com and dozens of other companies are inundating business users and CIOs alike with pitches for all sorts of SaaS applications. Right now, SaaS seems to be everywhere.

Of course, today, SaaS vendors want to work with CIOs, not replace them, but do CIOs need to work with SaaS vendors?

Maybe. Sometimes.

"SaaS is just a means to an end. It's part of a mosaic of solutions," says Peter Young, vice president of IT at pharmaceutical company MedImmune.

"I view SaaS as another arrow in my quiver," concurs Frank Modruson, CIO of the Accenture consultancy.

"SaaS is just another option," says Rick Milazzo, CIO of clothing retailer American Eagle Outfitters.

But despite their tempered enthusiasm for SaaS, all three of these CIOs use SaaS applications...judiciously.

So far, the SaaS phenomenon has been largely confined to smaller companies. "For CIOs in the mid-market, SaaS may be the only way to get enter-

Reader ROI

- :: Where SaaS does and does not make sense
- :: How a SaaS can transfer risk
- :: The inevitability of SaaS suites

"Don't expect something unique. If you need everything customized, you won't have success with SaaS," says Schwab Technology VP **Lloyd Hohenstein**.



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prise-class functionality," notes Rob Bois, a research director at AMR Research. But as valuable as SaaS may be to smaller companies, that value may not translate to the needs of larger enterprises. CIOs at larger enterprises agree that SaaS can play a role in their software portfolio, but even its fans say that role may be limited.

SaaS and the Enterprise

There are many questions a CIO must ask when considering the use of a SaaS application. But perhaps the most critical question is whether your company wants to rely on software designed for use by hundreds of other companies.

"Don't expect something unique. If you need everything customized, you won't have success with SaaS," says Lloyd Hohenstein, VP for finance, human resources, real estate and corporate communications at Schwab Technology, the financial services provider's IT division.

But SaaS does make sense if the process "is not complex and is vanilla," Hohenstein says. Unless there's a reason to build technology internally—such as assuring service levels that a vendor can't guarantee, SaaS is a good option, he adds. Assuming the software does the job well, of course.

What SaaS Is and Isn't

The term SaaS is often abused by vendors who frequently use it to refer to any hosted application that can be accessed over an Internet connection, notes Ben Pring, a Gartner research vice president. "Some vendors are relabeling as SaaS more traditional application outsourcing approaches, and that runs the risk of both confusing and antagonizing buyers," he says.

SaaS has a distinct meaning that's essential to understanding its role in your application portfolio. With SaaS, there's just one code base for the software, used by all customers, in what's called a multitenant architecture. While the software might be configurable by users to their individual needs, the code itself is the same for all and is not customizable for any individual customer. Any enhancements made based on one customer's requests immediately become available to all customers. So forget competitive advantage or differentiation based on the software itself.

The underlying data model and system architecture of SaaS is also not customizable. The advantage in this for the vendor is that it spends less time managing compatibility and upgrades across several versions of the software. It also spends less to support customers, as they all use the same version and they don't run it on their own equipment. That's one reason that venture capitalists have glommed on to SaaS. The VCs also like the fact that SaaS can reduce startup costs, promising faster time to market, notes

AWASH IN ACRONYMS

An annotated glossary to SaaS-type outsourcing models

ASP An application service provider handles the deployment of a typically noncritical IT function because the CIO doesn't want the overhead of owning it. Integration and compatibility issues are no different than for internally deployed software. Any cost savings are usually due to the ASP's use of cheaper labor offshore, not to a fundamental efficiency advantage conferred by the ASP strategy itself.

Examples: Oracle On-Demand ERP software, Workday HR software and any Web host

BPO A business process outsourcer handles an entire process for you, such as sending out paychecks or getting credit scores, and it makes sense when how the vendor delivers the function doesn't matter to the CIO; it's the result that you're buying.

Examples: ADP payroll, Accel medical transcription and claims processing, and Fair Isaac credit scoring services

MSP A management service provider handles a set of services on behalf of a company. These can be IT services (such as e-mail security and management), business services (such as dealing with telecom expenses) or both (such as managing a call center). Unlike with a BPO, with an MSP the CIO may care what technologies are in place, as what the MSP handles may interact with the CIO's other IT systems and certainly with the enterprise's processes. MSPs typically make sense for processes that require intensive oversight because of frequent change (such as virus blocking and telecom expense management) that the enterprise is not good at handling.

Examples: ScanSafe virus detection, Vercuity telecom expense management and Echopass call-center operation services. In some cases, MSPs offer customers a choice of self-management (through a SaaS offering) and vendor management (through an MSP offering). —G.G.

Warren Weiss, a general partner at Foundation Capital, which has invested in SaaS startups since 1996.

For CIOs, this all translates to several advantages: faster implementation (because there's no on-premise deployment), easier access to current technology (because changes are made just to the one code base) and fewer bugs (because having one code base reduces the complexity that can lead to errors), says Michael Mankowski, a senior vice president at Tier1 Research. It can also translate to lower costs for the enterprise if the SaaS vendor passes on the savings.

SaaS is thus a new wrinkle in long-available, on-demand, outsourced IT models, such as the application service provider (ASP), business process outsourcer (BPO) and managed service provider (MSP). (See "Awash in Acronyms," this page.) "It's the next step in the evolution of software development," says Gartner's Pring. Examples include Salesforce.com CRM; Everdream help desk management; SuccessFactors employee performance management; and Ketera spend management software.



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"SaaS gets us to having standard processes across all units," says Accenture CIO **Frank Modruson**.

is the data on that new employee sent to Accenture's in-house ERP system, which manages the employee's permissions and other attributes from then on.

Another key criterion for choosing SaaS is that the application isn't one that differentiates the company competitively, such as improving customer service or enabling higher margins relative to competitors. Thinking about SaaS makes a company ponder these issues, which in itself is helpful in determining an IT investment strategy. "Companies have an inflated view of how unique their processes are. You always think you need more customization than you really do," says AMR's Bois. "No one's going to care who you're using for payroll or Web conferencing, or even office productivity applications," adds Martin Perry, CIO of IT staffing firm Sapphire Technologies, which uses Bullhorn's SaaS software for front-office staffing and recruiting.

Accenture's Modruson notes that SaaS applications are less configurable (not simply uncustomizable) than the packaged applications most enterprises run in-house. That's often a blessing in disguise because it forces the business to use standard processes rather than invest resources in customizations that have no real value.

But using a standard SaaS tool does not necessarily mean that every enterprise gets the same results from it, says Modruson. "The tool is the enabler of your processes. The business processes are what you control," he argues. Several CRM tools, such as Salesforce.com, are praised for enabling enterprises' individual processes while delivering them through a standard but highly configurable code base. "The configuration and how you use it is the secret

sauce. Your process differentiations then come into play," says Sapphire's Perry.

SaaS is best known in the CRM space, thanks to Salesforce.com's aggressive marketing and its ease of use for salespeople compared to CRM offerings from companies such as Oracle and SAP, aided by the fact that sales groups often have discretion as to the applications they use, notes AMR's Bois. But SaaS also is widely used in the human resources and procurement spaces, both of which have a history of being served by outside firms in a service bureau model. Examples include Concur Technologies' expense and travel management software, SuccessFactor's employee performance management software, ADP's benefits management software and Ariba's procurement software. SaaS applications also can be found in a wide variety of specialty areas, such as Web analytics, container allocation analysis for shippers and help desk management—all of which have histories of being handled by outside service bureaus. Applications in these spaces typically rely on batched data exchange and widely deployed, standard interfaces to internal applications, making SaaS an easy fit, notes Tier1 analyst Mankowski.

Where SaaS Makes Sense

The prime reasons for a CIO to consider SaaS are its faster deployment times, its lack of up-front license and infrastructure costs, and its ability to address vanilla business processes so you can focus your resources on custom processes that make a real difference, says Accenture's Modruson. "Your startup costs are not as large, and you have the ability to get up and running quickly and change direction if needed. I don't have as much flexibility with packaged applications," he says. Equally as important, says Modruson, SaaS "gets us to having standard processes and a standard system across all units."

But none of these advantages matter if the application area is highly integrated with or dependent upon other applications and processes. A SaaS application must address a fairly isolated function, says Ken Harris, CIO of Shaklee, a manufacturer of health and cleaning products. "That's when SaaS is easy to do for the larger enterprise," Modruson adds. Accenture deployed a recruiting management application via SaaS because it doesn't interact to any great degree with other systems. Only after someone is hired



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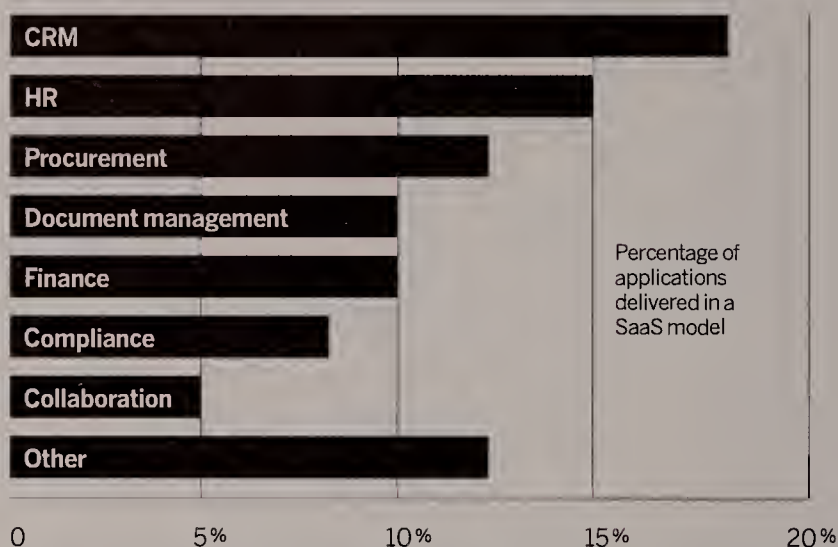


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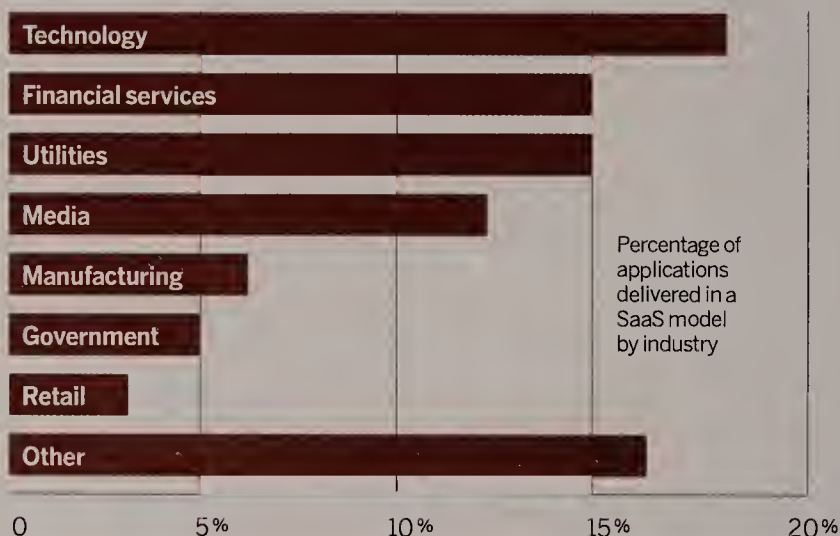
The usage of applications delivered as a service fall mainly in three areas: CRM, HR and procurement.

BY APPLICATION



Technology companies are the biggest users of the SaaS model, followed by financial services and utilities.

BY VERTICAL MARKET



SaaS TOMORROW

Gartner estimates that in **2005, 5%** of all business software spending was for applications delivered in the **software as a service** model, a figure it expects to **grow to 25%** by **2011**. The most well-known SaaS application, Salesforce.com, has caused the CRM category to have the highest rate of SaaS adoption, with 8% of all CRM deployments in 2005 (and 12% in 2006) delivered via SaaS.

SOURCE: Gartner

A third area that has seen broad SaaS adoption is Web conferencing, offered by WebEx, Citrix Online and Adobe. Applications such as Web conferencing and surveying work well with a SaaS approach because they let IT offer users functionality without having to invest in expertise and operations. "It's a scale play. I wouldn't build a survey tool myself because I don't do that many surveys," says Accenture's Modruson.

Where SaaS Doesn't Make Sense

If applications touch upon the core of the enterprise—typically ERP, financial, business intelligence and manufacturing systems—then SaaS should be approached cautiously, if at all. The main reason is that these applications are usually highly customized as they reflect the fundamental processes that differentiate a company from its competitors, says Shaklee's Harris.

For example, equipment distributor Zones wanted to add a series of custom BI applications to analyze sales and distribution, but CIO and Senior VP Anwar Jiwani didn't want to build the system in-house or dedicate staff to managing it. He considered SaaS-provisioned BI tools but realized their reports would be too generic to be useful. So he hired SeaTab Software to design and host custom BI apps. The idea was to keep Zones's internal resource investments to a minimum while still getting the desired technology. "My goal was to outsource the BI development," Jiwani says.

Another reason to avoid SaaS applications is that the functions you're looking for are so key to your operations that you must own them. "We have extremely high standards in terms of availability, and we run things on a global basis from one instance," says Dan Murphree, vice president of enterprise business applications at chipmaker Texas Instruments. "If a SaaS application weren't available even for an hour, it would cause a major business disruption," he says. "I'm not saying there aren't service providers that could do it, but if we do it at our level of stability and control, we know what we've got." Thus, Murphree reserves SaaS applications for noncritical functions, such as the IQNavigator, a tool for managing contractors, where downtime doesn't halt operations.

A third issue that typically rules out SaaS is integration. When Mark Brewer, CIO of disk drive maker Seagate Technology, was pitched on-demand ERP by Oracle, he said no. "It would be wonderful if I didn't have to manage the software patches, but the number of integration points to the rest of my environment is very high. Managing that would be a big problem," he says. But he had no problem deploying several SaaS-delivered HR applications,

"If a SaaS application weren't available even for an hour, it would cause a major business disruption."

—DAN MURPHREE, VP OF ENTERPRISE BUSINESS APPLICATIONS, TEXAS INSTRUMENTS

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Some application domains are gray areas for SaaS, including CRM. One high-tech vendor ended up choosing Oracle's CRM software over Salesforce.com because its use of CRM extended from order to cash, bringing the application into the heart of the ERP transaction system. The salespeople preferred Salesforce.com, but the CIO couldn't make it work at the ERP transaction level necessary for the company's sales processes. Not all companies need that level of integration, since they're not constantly recalibrating their sales forecasts or inventories, but for those that do, it's a complex integration task, agrees Schwab's Hohenstein. "If someone is taking orders in the field, they need that integration. If not, the data can be sent in a batch mode," notes Tina Phillips, a principal at Deloitte Consulting's SaaS practice.

The Integration Challenge

The convenience of using SaaS applications—especially when adoption is driven by business users—can mask a significant IT challenge, notes Gartner's Pring. That challenge is integration, both with other enterprise applications and with data sources.

In some respects, integrating SaaS can be easier than integrating in-house or ASP-provided applications. That's because SaaS's multitenant nature requires vendors to pay more attention to the data exchange and application programming interface (API) connections to other applications so that a broad variety of customers can use the SaaS application without any customization or significant hand-holding—both of which would defeat the SaaS vendors' business model. "Integration is a little bit easier because someone has already given some thought to it," says Sapphire's Perry.

Another factor, says MedImmune's Young, is how separate the SaaS application is from other enterprise applications. "In a loosely coupled application space, it may be easier to bolt on SaaS apps if they use common APIs like XML," he says.

Integration with enterprise data is a more straightforward issue, says Rob Desisto, a Gartner research vice president. Most SaaS applications are designed to export and import standard data formats for their application domains—vendors really had no choice if they wanted to be taken seriously, he notes.

Typically, SaaS works best when data is exchanged in periodic batches, not in real-time transactional environments, says Calvin Do, CIO at digital imaging vendor EFI. At EFI, salespeople use Salesforce.com to manage leads, but after the lead gets past the quotation stage, the data is passed to the ERP system for deal analysis and order management. Similarly, performance

THE TRUE COST OF SaaS

Don't forget to figure in the management costs

Software as a service (SaaS) applications are typically rented on a per-user-per-month basis. There are no up-front licensing costs, and no need for up-front equipment and development resources. The subscription fee covers software maintenance and operational costs as well as any upgrades.

CIOs like that model. In fact, "I would like to convert traditional applications to pay-as-you-go," says Peter Young, vice president of IT at pharmaceutical firm MedImmune—something he's begun to discuss with his traditional vendors come upgrading time. ("There's no requirement to link subscription pricing to on-demand," notes Rebecca Wetternann, an analyst at Nucleus Research.)

Perhaps the toughest aspect of SaaS pricing is figuring out whether the subscription pricing leads to a higher total cost of ownership (TCO) than deploying the software internally. While enterprises know how much the licenses cost and what the annual maintenance fees are, most don't know the operational costs—those for the operations and support staff, the hardware, the network resources and so on—so they can't compare in-house TCOs to SaaS costs. Those that can make the calculations also have to estimate how often they expect to upgrade and what the upgrade would actually cost—not just the new licenses, but also the integration, training and operations, notes Rick Milazzo, CIO of retailer American Eagle Outfitters.

Similarly, predicting usage of SaaS applications is inexact. "The costs are not perfectly predictable either way," says AMR Research analyst Rob Bois.

But for many, it doesn't matter what the TCO is for SaaS. Enterprises make a rough calculation that if a SaaS application costs no more than a traditional license amortized over five years, plus the maintenance costs, it's worth buying. Even if it costs a little more up front, not having to manage the software is often worth the price. —G.G.

reviews and résumé analysis happens in SuccessFactors, but salary and title changes, as well as new hires, are transferred to the ERP system. This approach requires duplication of data between the ERP and SaaS applications. Do notes, as well as some custom integration work to reconcile the data when it is brought into the ERP system, but he figures the effort took half as much resources as doing a similar integration between in-house apps, which are not as well-designed for interoperability.

In many respects, adoption of multiple SaaS applications mirrors what happened in the 1990s as companies brought in so-called best-of-breed applications and then had to figure out how to integrate them to execute business processes that transcended any one application. "This is eerily reminiscent of 10 years ago," says Pring, although he acknowledges that SaaS vendors typically

are much better at connecting to other applications and better at using standards than vendors were a decade ago.

Back then, most enterprises decided the integration effort for best-of-breed wasn't worth the cost, so they began adopting

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suites instead. The same is likely to become true for SaaS, where the first such suites are already emerging—and CIOs need to understand that adopting a specific SaaS application may put them on the road to bringing in additional SaaS applications, ones that may compete with existing suites they're heavily invested in, says Gartner's Desisto.

For example, Salesforce.com is intent on creating a suite based on its CRM software and its AppExchange platform through which other companies can develop plug-in applications for Salesforce.com that use the same architecture and data model, thereby eliminating the need for customization that could cause breakage when Salesforce.com is upgraded. ERP provider NetSuite has a similar strategy, though largely limited to the mid-market, notes Tier1's Mankowski.

How to Protect Standards

Other issues arise when choosing to deploy SaaS applications, but these issues are familiar to enterprises with a history of outsourcing IT. They may not, however, be familiar to all SaaS providers, especially to those that have focused mainly on small business customers.

Service levels. Because an outside entity is running the software, there's always the fear that your enterprise won't get the uptime levels and other services you need. Salesforce.com had several widely reported service outages last winter, confirming some CIO's worst fears about SaaS.

"But there have been no major issues since then," says AMR analyst Bois, with Salesforce.com or other providers. "Reliability is not as much a question as it used to be," he adds, because SaaS providers typically deliver the same availability as most enterprises do, with uptimes of 99.999 percent. Bois does recommend that any SaaS contract include a service-level agreement (SLA) of at least 99.5 percent availability, which Bois says is the common minimum.

But don't expect most SaaS vendors to have anticipated the need for SLAs, warns Gartner analyst Pring. Reflecting the vendors' focus on mid-market customers, "85 percent of SaaS apps have no SLAs," he says. Vendors targeting larger enterprises are more likely to have SLAs in place.

Security. Security concerns have diminished in many CIOs' minds. There have been no reported breaches at SaaS providers. "I used to be concerned about sending sensitive information out," says EFT's Do, "but then I realized I already send out payroll information, so I realized I could trust outside providers." He verifies the vendors' security plans, though, before granting that trust. Schwab prefers that its SaaS providers segregate its data onto separate storage hardware when critical information is involved, notes Hohenstein, although it will allow commingled storage in some cases. "Either way, we have stringent requirements on security," he says.

But not everyone is so trusting. "We have not gone to a SaaS provider for applications that use sensitive information," says TI's

Murphree. "We don't want to give up control."

Risk management. CIOs should make sure that they demand the same auditing and control requirements from SaaS providers that they would of any outsourcer, including "safe harbor" provisions for ensuring data privacy, rights to the software and all data in case the vendor goes out of business, and the ability to audit the vendor's controls (including the use of SAS-70 self-audits), says Gartner's Desisto. "Certification processes are now standard, so it's easier to work with a reputable company for external certification," says Accenture's Modruson. The trick, says EFT's Do, is to find SaaS providers who understand this need. "The light bulb is not

on as much as it should be, since most are smaller companies," he says.

Another precaution to take is to get the rights to the software should the vendor fail, so you can run it in-house until you find a new option, says Sapphire's Perry. As part of that, make sure to get backups of the data stored by the SaaS provider.

The use of SaaS can also help reduce risk. For example, "there's less risk in trying to deploy SaaS quickly than there is in investing a lot of money on internal

resources, which are the scarcest resources I have," notes Med-Immune's Young.

In some industries, SaaS providers can assume their customers' risk. Many U.S. small banks, for example, use SaaS providers, such as Intuit's Digital Insight division, for their Internet banking and wealth management platforms, notes Basil Blume, CIO of Colorado Capital Bank. Small banks don't have the resources to meet all the regulatory and security needs for such software, so it makes sense for them to use firms that do, are audited by regulators and assume financial accountability in case of failures, he says. "We transfer the risk. There is a bit of premium to pay, but then I don't need to keep those developers on staff either," Blume notes.

The Future: One SaaS Step at a Time

As the industry matures, enterprises may find that they can depend on SaaS for more mission-critical needs, perhaps even one day running their ERP applications in that model. "I would consider ERP via SaaS," says Scientific Games' CTO Steve Beason, "but I would need to get protected financially, not just feel comfortable about failure recovery."

But there's a lot more work to be done before that can happen, notes Gartner's Pring. SaaS is possible today because there's less custom enterprise code than in the past. "Twenty-five years ago, it was all custom code; 15 years ago, ERP applications were packaged and reduced custom code," Pring recalls. But custom code today still accounts for about 60 percent of enterprise software, meaning there are a lot of areas that SaaS just can't handle. **CIO**

"There's less risk in trying to deploy SaaS quickly than there is in investing a lot of money on internal resources, which are the scarcest resources I have."

—PETER YOUNG, VP OF I.T., MEDIMMUNE

Galen Gruman is a frequent contributor to CIO. To comment on this article, go to www.cio.com/article/109706.



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CIO EXECUTIVE VIEWPOINT

Healthy Transformation

A prescription for better business and health outcomes

Jeff Miller

Vice President, Health and Life Sciences, HP

Jeff Miller is responsible for market strategy, business planning, service offerings and solutions development for the healthcare provider, health insurer, pharmaceutical/biotech and life sciences research market segments. Miller has more than 20 years of experience in the healthcare, manufacturing, public sector and technology industries.

The health and life sciences industry is under extreme pressure to transform. The convergence of bioscience innovation, increasing healthcare costs, the aging population, technology adoption and individuals demanding more empowerment over their health management are creating a "perfect storm" scenario. Here, Jeff Miller explains the importance of being able to capture, manage and gain insights from information.

What are some of the greatest challenges in delivering medical information across the healthcare environment today?

First is the electronic capture of health information at the point of encounter and point of care. While there has been great progress in technology adoption and usage, most healthcare organizations still manage information using the same manually-intensive methods, and much information is not captured or available digitally. Second is consolidating healthcare information from dispersed vendors and systems into a common information utility that can be leveraged to create better insights for better decision-making and business and health outcomes. The final challenge is enabling productive collaboration among many different participants in the health and life sciences value chain.

"CIOs need to lead the business agenda and demonstrate how information can improve efficiencies and quality of care."

How can information integration respond to these challenges?

Different information sources must be tightly linked to reduce costs and mitigate risks. If you don't integrate information, it is difficult to create meaningful processes and have people work together to create an integrated set of services. From a technologist's perspective, it allows us to begin to think about how we address the issue of consolidating dispa-

rate applications into common utilities and multiple services into common processes and services that expand across an ecosystem.

As healthcare providers look toward improved integration of clinical research and delivery systems, what issues must be addressed?

The traditional issues, such as system integration, security and information access, are technical. The broader issues are: What is the goal, why are we putting these systems together, and what do we hope to achieve? As we begin to address these issues, there are opportunities for improved efficiencies and improved quality of care. For instance, there is no need for physicians to enter information into a patient record system and then re-key it into a clinical research system. The key issue is goal alignment followed by some very tight business control points. For instance, what do you do when you run patient information retrospectively through a clinical study and find a condition that needs immediate treatment or that presupposes future treatment? How do you communicate back to the patient and what is your ethical responsibility to the patient?

What do you see as the greatest business challenges for healthcare and life sciences?

Managing costs is at the top of everyone's agenda. This includes effectively utilizing resources and information to improve cost management, eliminate redundancies, remove errors from the system, and provide the greatest quality of care in the most efficient way. Fundamentally, this is not a technology issue; it is a technology adoption issue. The other top concern is how to mitigate health and business risks while improving quality of care. Issues such as reducing medication errors, better managing drug interactions, ensuring the authenticity of drugs delivered to market, and managing innovation and patient safety are also concerns. And as the industry migrates to information-rich/technology-enabled processes, the privacy and



security of an individual's information will be an increasingly sensitive topic.

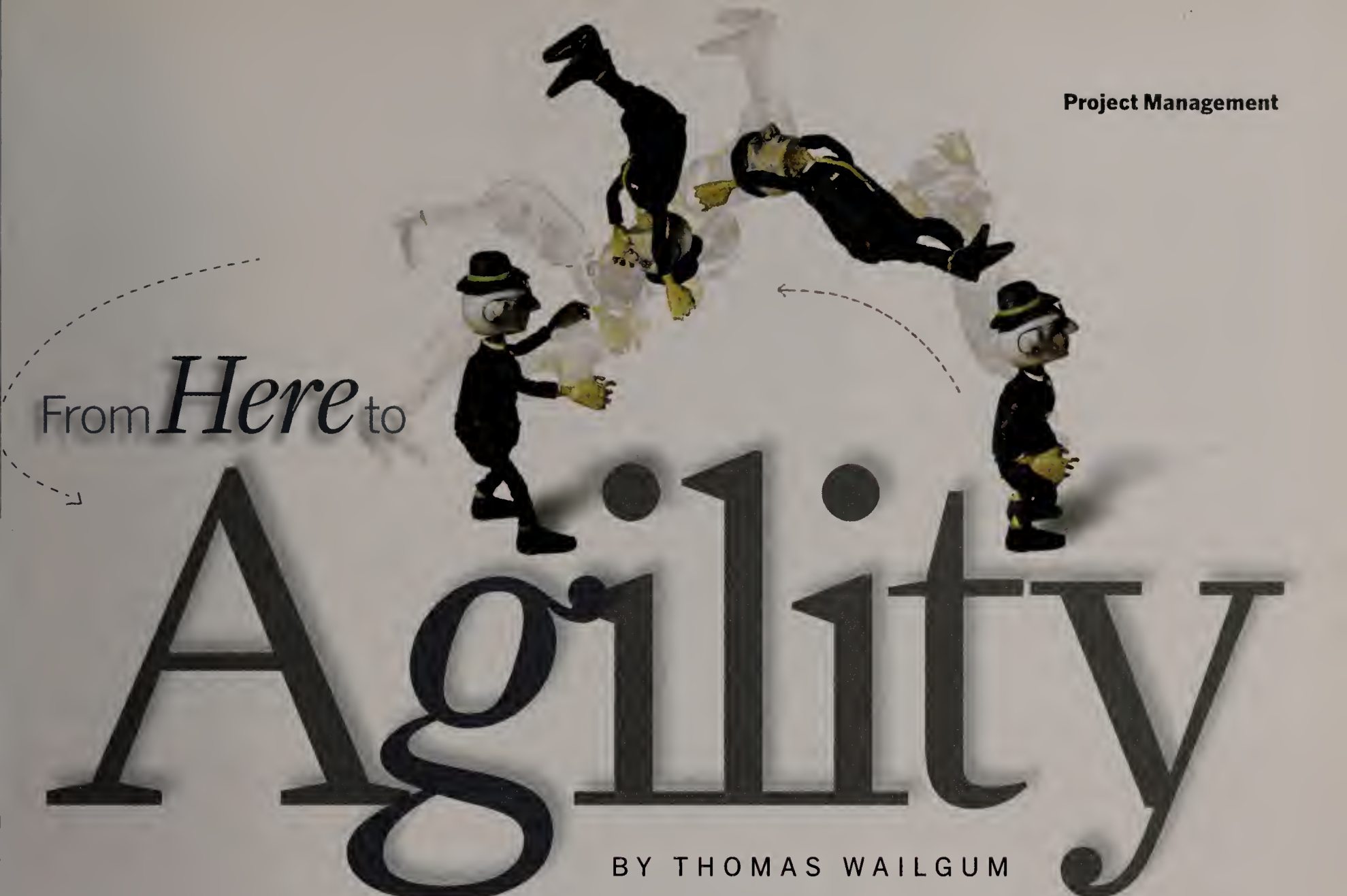
What advice can you offer CIOs to effectively manage health information?

CIOs need to lead the business agenda and demonstrate how information can improve efficiencies and quality of care, and how over time it will help transform the health enterprise. CIOs must clearly articulate a point of view that is not only compelling, but also credible in terms of providing a roadmap and associated benefits. Finally, CIOs also need to become change agents. Managing the inside-out and outside-in requirements necessitates a balanced technology agenda. Navigating and understanding the technology adoption barriers will require close partnership with key stakeholders.

For More Information:

Check out this case study, "Collaborating to Create Personalized Medicine", at www.cio.com/whitepapers/hphealth





From *Here* to

Agility

BY THOMAS WAILGUM

Study after study indicates that **agile methodologies** produce better results in software development and project management. **So why have so few CIOs adopted them?**

FARM CREDIT SERVICES OF AMERICA doesn't sound like an organization that courts controversy. The cooperative association makes loans to more than 66,000 Midwest farmers and cattle ranchers so that they can buy cows and pigs and tractors and backhoes. Its main reason for existence—providing \$11 billion of operating capital and real estate financing to those who feed America—is as homey as the images of corn fields, gently rolling green pastures and rugged, resolute farmers that adorn its marketing materials.

It's also based in Omaha, Neb., known more for steaks than as an avant-garde laboratory for one of IT's most hotly debated development methodologies: agile programming.

But agile is exactly what Farm Credit Services has embraced, whole hog.

The Agile Advantage

Agile programming means different things to different people, but at the core of all agile development methodologies are these principles: Business stakeholders are colocated with small, autonomous development teams; the teams rely less on up-front requirements and documentation than on face-to-face conversations; those conversations provide a continuous dialogue for software design,

testing and refocusing. The constant refocusing, its advocates say, leads to more timely and useful business tools. (For a tutorial on agile programming, see "ABC: An Introduction to Agile Programming," www.cio.com/article/100501.)

Agile's ascendancy is in direct response to IT's dolorous history of software project failure, cost overruns and the concomitant business dissatisfaction with traditional IT design and development—the waterfall methodology—in which development slowly cascades through a series of steps including requirements analysis, design, implementation, testing, integration and maintenance. But for a variety of reasons, not everyone has warmed to agile. In fact, just 17 percent of North American and European enterprises use agile development processes, according to Forrester Research's "Enterprise Agile Adoption in 2006" survey.

Farm Credit Services welcomed agile programming because the waterfall method had been failing the organization, as it has many others. "We got requirements and would build [the

Reader ROI

- :: How to change the culture of development
- :: How agile can lead to IT-business alignment
- :: Tips for managing the agile way

applications], and nobody was happy at the end," says Farm Credit Services CIO Dave Martin. One particular project, which was a migration from a mainframe-based customer application-processing system to a Web-based version called PinPoint, involved more than 200 pages of requirements and, by the end of 2004, had taken nearly three years to complete. In the interim, the requirements and business needs had changed, and most of the members of the original business team were gone. The resulting bug-filled system was shelved not long after its shaky debut.

And that's not unusual. According to the 2006 "State of Agile Development" survey by The Agile Alliance and VersionOne, respondents said only 29 percent of traditional projects were "somewhat successful" or "very successful." (Conversely, respondents said 81 percent of their agile projects achieved that level of success.)

The Standish Group, which famously compiles its Chaos data on software project failures, reported in its 2006 research that just 16 percent of waterfall projects succeeded as opposed to 41 percent of agile projects. Standish Group Chairman Jim Johnson, who has been studying project failures for years, says it "boggles" his mind why companies still resist agile development. "To say that companies or CIOs are reluctant to embrace agile is like saying they wouldn't take aspirin for a headache," he says. "And they're not only not taking the aspirin, they're banging their heads against the wall and wondering why it hurts."

Going Agile

Martin decided to "shake things up" two years ago. After some gentle nudging from Lou Thomas and Beth Schmidt, his directors of applications development, the team adopted Scrum, which has two-week iterations (called sprints), daily meetings, and frequent iteration reviews and testing. "Our premise is to have potentially shippable product every two weeks," says Thomas.

At Farm Credit, there are six development teams composed of a business analyst, project leader, lead developer, two or three developers, a database engineer, one to three business owner participants and a QA engineer. In place of reams of requirements, development teams write "user

questions

Are YOU AGILE?

Lots of companies claim to be agile. But are they really? VersionOne, an application lifecycle management provider, created this list to help you figure it out.

You might *not* be agile if...

1. The "Send/Receive" and "Save As" buttons initiate most team communication.
2. Your whiteboards are mostly white.
3. "Test-driven" still refers to your car.
4. You don't yet know what PHB stands for.
5. You know what CPM stands for, and continue to rely upon it.
6. You spend more time trying to manage project dependencies than remove them.
7. Someone still believes in the "Can't Chart." (Oops, that's the Gantt chart.)
8. Developers only develop, testers only test, and managers just manage.
9. Simplicity is presumed to be simple.
10. A change control board meets...ever.

SOURCE: VersionOne



stories" as the project progresses, detailing business functionality enhancements and technology, successes and challenges. "User stories are the main mechanism to convey the business needs," Martin says. Farm Credit's waterfall projects used to average 100 or so defects per rollout; agile ones now average zero to two.

"We've rolled out five key products with phenomenal results," Martin says. "In each case our business owners are ecstatic with the end result."

Agile, Agile Everywhere? Not So Much

CIOs of companies large and small say they have either abandoned waterfall methodologies or are gradually phasing them out. "I don't do the 'I'll deliver everything to you in 18 months,'" says Raymond Dury, CIO of Fifth Third Bancorp in Cincinnati, who has

adopted an agile method called Extreme Programming. "That's long gone."

But waterfall processes are not, in fact, long gone. In addition to the aforementioned Forrester survey (just 17 percent using agile), a March 2006 survey that polled readers of *Software Development* magazine and *Dr. Dobbs's Journal* found that 60 percent were not using *any* agile methodologies in their organizations at all.

Perhaps not coincidentally, CIOs are actively looking for project management assistance. Almost three-quarters of CIO readers are either "extremely interested" or "very interested" in finding out how to improve their project management discipline, according to our latest survey.

All this leads to one obvious question: If agile development is so darn good, then why hasn't it been universally adopted?

The Trouble With Agile

The ceremonies of software development are deeply ingrained in IT. With traditional waterfall processes, the business throws its requirements over the wall to developers who hole up and start coding as they see fit. An 18-month target date can seem like decades away. Lost afternoons are no big deal. Who cares what the "lusers" (coders' derogatory term for users) really want?

"A lot of people on the IT side thought [agile] was the flavor of the month," Martin recalls. "Some just said, 'I'm not going to do it.'" (Those programmers, Martin says, have been churned in agile's wake.)

Opposition to agile methods also can come from enterprise architects, project managers and quality assurance staffers, says Carey Schwaber, a senior analyst for application development at Forrester Research. Enterprise architects worry that there's not enough up-front design with agile, and the consequence is spaghetti code. Agile teams are self-managing, and the project leader's role shifts dramatically—from ordering around to facilitating. And since QA testing happens throughout the process, and not just at the end, there's usually resistance from the testing folk.

Misapprehensions about agile still run rampant in IT organizations. Eugene Nizker, a former financial services CIO and current consultant, ticks off the most infa-



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Project Management

mous ones: Agile teams do not plan. Agile teams skip design. Agile teams do not test. Agile means no documentation.

In addition, executives can feel left out of the daily scrums and sprints of agile life, engendering insecurity at top levels. All this has hindered agile's acceptance, says John Scumniotales, one of the creators of Scrum. "It's easy to talk about the value of building software this way, but if I'm betting my enterprise on this project, senior management needs some controls and visibility into the process," he says, citing the need for an agile-specific tool that functions like a Gantt chart, which visually illustrates project progress. "That's where we need to get to," he says.

But given the epic floods of water-fall failures, CIOs owe it to themselves and their organizations to get agile. "The world just doesn't hold still and wait for 18 months anymore," Fifth Third Bancorp's Dury says.

Case Study: Quick to Market

Dury hasn't abandoned traditional development processes at his company, which has almost \$100 billion in assets. Some development projects, he says, such as those that affect base infrastructure or intensive SOA projects, just "can't handle the type of intense change" that comes with agile methodologies. But he's excited about his team's adoption of Extreme Programming.

The head of the bank's retail product line told Dury about a new product the bank wanted to sell, an investment tool (which would later be called Stock Power CD) that would offer customers stock market-based earnings potential on their certificates of deposit. In truth, the bank was playing catch-up. "We were probably missing the market [for this type of product]," Dury says, "and we wanted to be in the market." So speed was key.

Using Extreme Programming tactics, his team talked through solutions that would meet the business needs quickly and be technically feasible. More conversations ensued with retail banking (lots of face-to-face time, little up-front documentation). Two development teams, working in concert with each other and the consumer banking and retail line departments, formed within IT: the investment adviser team and the CD devel-

opment team. The teams worked closely with the bank's affiliates (which would eventually sell Stock Power CD) and investment advisers to satisfy legal and financial requirements.

Extreme Programming—daily huddles and continuous business input, as well as recurrent testing—"created the urgency to provide this service to the customers ASAP," Dury says. Just four weeks after the initial conversation, several of Fifth Third's affiliates started offering the Stock Power CD product. "Normally a new deposit product introduction would take about 90 to 120 days," Dury notes, adding that the new product created "significant additional deposits."

Dury says he couldn't imagine doing this project any other way. Along with the faster time to market, it also enabled "a closer working relationship with the business side" and

enhanced the business's confidence "in our ability to deliver and meet expectations."

The Alignment Add

As Martin's and Dury's stories show, agile project methods demand continuous dialogue between the business and IT. Colocating the business and IT team members engenders a kinship that's usually absent in traditional software development.

"They're on the ride with you," says Ajay Waghray, Verizon Wireless's CIO of the Midwest U.S. area. "If something is not going right, they're partnering with you right there."

CIOs who have adopted agile methods say that changing their relationships with business stakeholders can have some surprising results. Waghray recalls recent conversations

Who (and What) Is the SCRUM MASTER?

The best way to implement agile processes is your own way

HIS YEAR THREE RESEARCHERS from Massey University in New Zealand set out to determine whether agile development truly was better than traditional development. It truly was. But they also discovered that companies that used more than one agile method had more success. The most effective combination was Extreme Programming (XP) coupled with Scrum. "It appears that successful adoption of an agile approach does not necessarily just mean selecting an individual method," they wrote. "Rather, it may be better to consider blending multiple complementary methods."

CIOs, analysts and agile experts recommend starting with a blended, customized agile approach. "I find people saying that they're taking a little of each and creating their own agile process. You don't have to be religious on these things," says Jim Johnson, chairman of The Standish Group. "In turn, they were able to bring success rates up and deliver better products and services to stakeholders."

Scott Spencer, vice president of engineering at First American CoreLogic, has been using agile processes at his company for almost three years. First American CoreLogic is the largest provider of property and real estate data in the United States, and Spencer's 12 development teams span the globe—on the West and East coasts and in India. His teams all employ Scrum, but he's done his share of customizing. "I don't know anybody doing pure Scrum or pure XP," he says. "It's hard to do." For example, in Scrum there's no concept of a project manager. But Spencer uses a staffer in a project manager-type role (called the Scrum master), which works more effectively with his development teams. "You have to map agile to your existing organizational needs," Spencer says.

—T.W.

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with key operations and marketing executives in which he used a more agile approach. "I would tell them on the call, 'I don't want any requirements. What do you want? Just tell me, and we'll talk about it,'" he says. The executives asked if they should write down what they wanted. "And I would say, 'No, no, no. Don't give me requirements.'" The approach, he says, "was foreign to people."

Verizon Wireless's VZ Navigator product, which provides users with turn-by-turn, voice-supported directions on their mobile devices and has become one of the company's most popular mobile services, was heavily agile-influenced. Waghray's team consisted of stakeholders from IT, sales, customer care, marketing, training and finance. The team's main focus, Waghray says, was to develop the "simplest complete" solution right away, and then build upon that to make better solutions. "The reason it was successful was that the [agile] methodology encouraged constant communication and alignment across all stakeholders, leading to parallel development of not only the IT solution but also of training documentation, test cases, external and internal interface validation and development, and user communication to get them ready for launch," he says.

To many of the businesspeople on the team, the results were shocking. They told Waghray that this project should have taken three times as long as it did, which was roughly eight weeks from start to finish. According to Waghray, the VZ Navigator project "made a significant and immediate impact on the bottom line and it has now enabled an organizational capability to do this with similar products." It is "a culture and timing change," Waghray says of the process, "but I have never gotten more accolades from a business project."

Managing the Agile Change

Since agile teams are designed to be autonomous bands of rapid change agents making critical business decisions on the fly, the once-immutable laws of project management shift dramatically. Because waterfall's typical 18-to-24-month development times are drastically reduced to two-week windows, every day of development and every conversation become critical. In Dury's IT shop, mornings start with a team huddle and a breakdown of



"To say that companies or CIOs are reluctant to embrace agile is like saying they wouldn't take aspirin for a headache. And they're not only not taking the aspirin, they're banging their heads against the wall and wondering why it hurts."

—Jim Johnson, Standish Group chairman

what everyone is responsible for completing that day. "We don't need to talk about what gets done three weeks from now—this is what we want to do today," Dury says. "We don't want to lose days."

It's incumbent on CIOs to set the new expectations—teamwork, openness, collaboration—for everyone in their agile group. "There's an expectation of collaboration. You can't just go work in your own little world," says Farm Credit Services' Martin. "There's also a new visibility into the work and, in some cases, the nonwork."

Those team members who resist, however, will more than likely find themselves out of a job. (An old Persian saying seems appropriate for CIOs to remember: "The dogs bark, the caravan passes on.") Scott Ambler, an agile expert who works as practice leader for agile development at IBM, suspects that many developers, requirements analysts, and data and testing staffers are worried about agile's career-changing consequences. "They have likely worked on a slew of failures, and they often feel powerless to change things. Worse yet, they have the threat of outsourcing hanging over their heads," Ambler says.

The CIO's job is to manage the anxiety and ensure that his team focuses on producing high-grade software in a timely and cost-efficient manner. "In the agile community, the only measure of progress on a software development project is the delivery of working software," Ambler says. "The traditional development community has lost sight of that."

An Agile Tutorial

To learn more about **AGILE METHODOLOGIES** and find answers to questions you were afraid to ask, go to www.cio.com/article/100501.

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A Long Look in the Mirror

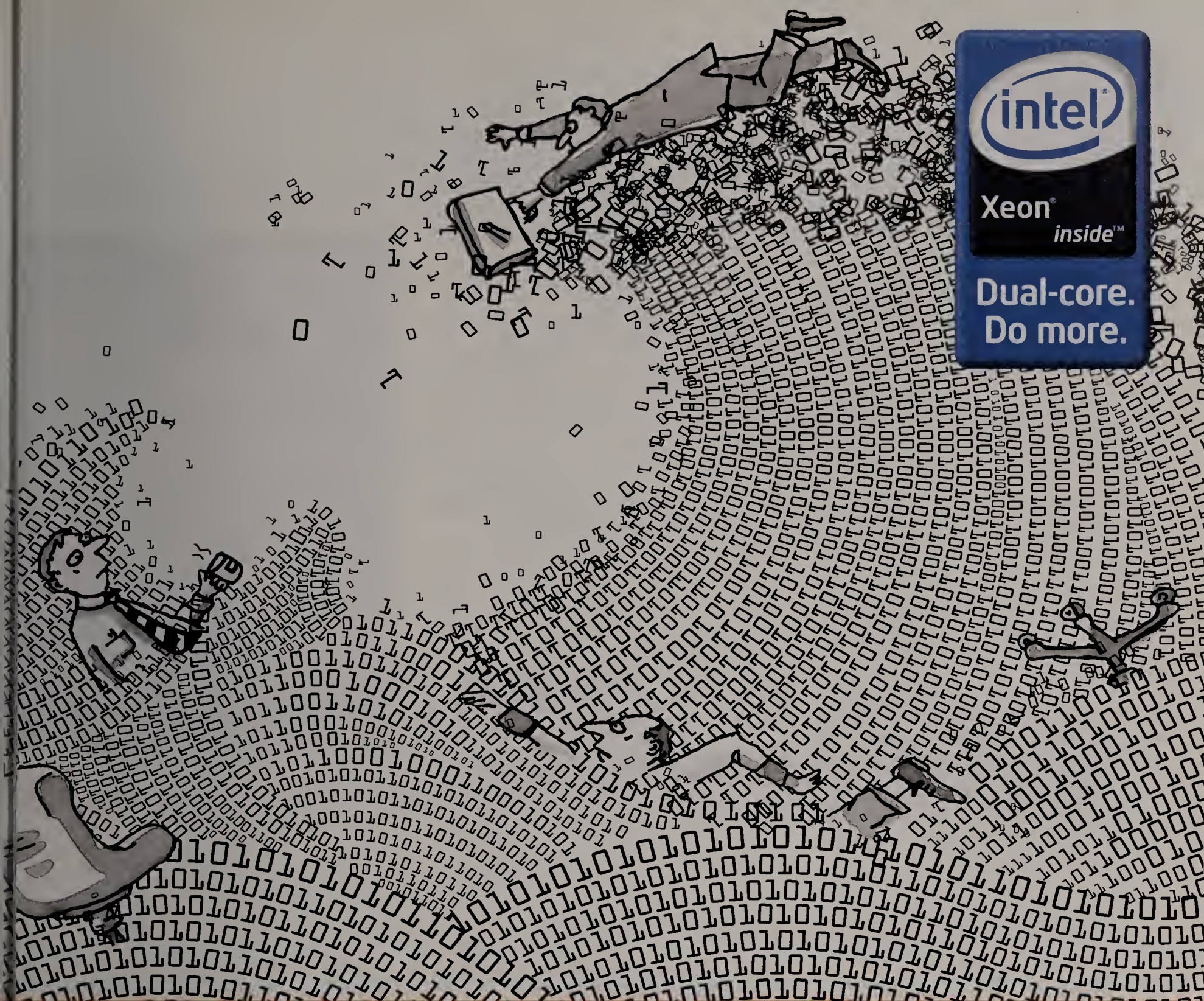
Skepticism is the word most often used when CIOs and analysts are asked why so many CIOs have been cool toward agile software development. They hear about it at a conference or in an article and it sounds good, but the 2006 "State of Agile" survey reports that only 5 percent of respondents cited the CIO as being the initial champion of agile development processes. Surprisingly, 11 percent said their president or CEO was driving agile acceptance.

Without the CIO's backing, as well as support from influential business stakeholders, agile's software development and project management time and cost efficiencies cannot be realized. "When companies don't have a VP-level or CIO-type executive driving adoption of agile, they will run into so many obstacles," says Forrester's Schwaber. At Farm Credit Services, Martin's agile move has grabbed the attention and support of his CEO. There are no obstacles (besides keeping up with project demand), he says.

The agile mentality has even proliferated throughout the rest of the organization. Martin knew he'd made the right move when he'd heard that business teams were holding daily stand-up meetings—mirroring IT's practices. "We've even got business units asking, How can we be more agile?" he says.

Martin's agile journey has come full circle. He's gone from being a CIO who didn't know anything about it or anyone doing agile, to an agile evangelist, spreading gospel at conferences, trade shows and CIO breakfast meetings. "I couldn't fathom going back to a waterfall methodology," he says. **CIO**

Senior Writer Thomas Wailgum can be reached at twailgum@cio.com. To comment on this story, go to www.cio.com/article/109751.



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CIO EXECUTIVE VIEWPOINT

Redefining Project Success

Using Real Leading Indicators to Navigate to Project Success

Patrick McGuire**President, Surrex Project Solutions**

Patrick McGuire has a 20-year IT history as an engineer, developer, database administrator and project manager; he founded and sold several software companies, including Fast Track Solutions. After becoming a CIO, McGuire consistently delivered on key technical strategies and critical projects that helped catapult his last company from a \$35M to a \$180M business in just three years.

"Most companies are using the wrong metrics to measure project success," says McGuire, now president of Surrex Project Solutions, "Traditional measures don't predict project success or accurately forecast project issues." This assertion flies in the face of current practices, as he explains below:

What is the most widely accepted method of predicting project success?

Based upon traditional understanding, most project managers will tell you "on time and on budget" equals project success. For example, Earned Value, a common performance calculation, measures the Schedule Performance Index (SPI) and Cost Performance Index (CPI). One would think a higher SPI/CPI represents a more successful project, but, that's not always true.

"Traditional measures don't predict project success or accurately forecast project issues."**Why are these metrics wrong for measuring project success?**

Being on time and within budget doesn't guarantee success. As a CIO, I had projects that went over budget and schedule and yet were embraced by users and applauded in boardroom—in other words, they were successful. Conversely, I have witnessed on-time and on-budget projects that were complete failures. "On time/on budget" are not always accurate indicators of success. Recently, I evaluated a large project where the SPI and CPI were perfect; however, during testing, bubbling customer dissatisfaction finally boiled over and the project blew up. CPI and SPI simply did not forecast the failure.

So are these metrics inherently flawed for measuring project success?

Yes, at least for predicting and forecasting. Schedule and budget variations are just symptoms of the root cause. Lack of user satisfaction is ignored. Since these metrics are treated as "leading" indicators, nobody foresees trouble, and when the project reaches the magical 80% mark, the "surprise" revolt begins. Users hate the product, won't use it and declare IT isn't delivering what they need. These metrics are best used as "trailing" indicators to make adjustments on the next project.

So why are companies still using them?

It's what project managers are taught. In a PMP study guide, 441 pages describe measuring and managing schedule and budget, but incredibly, only two paragraphs focused on user satisfaction! Also, these metrics are presented as empirically calculated "facts." In reality, they are estimates with plenty of room for interpretation. I've seen project managers "calculate" the numbers overly optimistically and, surprise, they come up with a perfect SPI. However, in reality the project is already in big trouble.

Then what should we be measuring?

User satisfaction more accurately predicts and forecasts project success. The well-known Standish *Project Chaos* study ranked executive support and user involvement as the top project success factors. Wouldn't it be useful to tie these factors to "success" metrics? At Surrex Project Solutions, we use the User Satisfaction Index (USI) and the Executive Sentiment Index (ESI). Every week, the project manager collects and tallies key data. If either score falls below a threshold, a mitigation plan is executed. These



two indexes have proven to be true leading indicators of project success.

What are the results of these new performance indexes?

True project success. Think of the last time you went to a restaurant. If the food arrived a little late and the bill was a little higher than expected, but the service and food were excellent, it would have been a successful dining experience. If the service and food were poor, but the price was as expected—you would rate it a failure. Through the use of leading indicators such as USI and ESI as predictors, the normally-problematic 80% point in the project will be a pleasant non-event—everybody knows exactly what is coming, with major issues having been resolved long ago. And as a byproduct, budget and schedule performance are maximized.

For More Information: Check out this white paper, "Achieving True Project Success Using Real Leading Indicators", at www.cio.com/whitepapers/surrexprojectsolutions



How to...

HOW TO FIND IT. TALENT FROM BANGOR TO BOISE

Luring good recruits is hard for mid-market CIOs, harder still if you're located outside technology's hot spots. Check out these winning strategies.

BY C.G. LYNCH

Nine years ago, Denise Stephens worked for aviation behemoth Boeing, at one of its divisions in St. Louis, a city that consistently tops the list for having one of the highest crime rates in the country. She often wondered if there was a better spot to raise her family. Then the Washington Savannah River Co., a \$300 million firm that manages a nuclear materials site for the U.S. Department of Energy, convinced her that Aiken, S.C., beat St. Louis by a country mile. "I got recruited to come down here, and they toured me around," says Stephens, now the company's CIO. "I love horses, so they showed me all the farms and hooked me up with a real estate agent who specializes in equestrian properties. There wasn't any traffic, and it was a better place to raise my kids. That's how they got me here, and now, when I'm trying to recruit others, I do so in turn."

Reader ROI

- :: How to fight candidates' career path fears
- :: Strategies to emphasize the strengths of your locale
- :: Ways to retain talent once you find it

Draw upon the talent you've already hired to find reliable candidates: "We've got three new college hires this past year and they were all friends up at Clemson University."

—DENISE STEPHENS, CIO, WASHINGTON SAVANNAH RIVER CO.

But for Stephens and her mid-market peers who are located outside traditional IT talent hotbeds, luring recruits takes creative work and planning—especially for lower-level jobs where companies can't roll out the red carpet like they do for potential C-level candidates.

Just ask Jeff Roggensack, VP of IS and technology for Alere Medical, a \$65 million company that implements remote patient monitoring systems, based in Reno, Nev.—a town known more for its gambling and legalized prostitution than for cultivating hotshot programmers. When he served as CIO for United HealthCare of Illinois (based in Chicago) and later RehabCare Group in St. Louis, he never had to search high and low for talent. "There were people to be had," he says. But once he joined Alere in late 2004, he had to prioritize recruiting work with local area colleges and reach out to people who had tired of the nearby San Francisco area.

Despite the hurdles, Stephens and Roggensack have built strong IT departments. Better still, they've implemented measures to ensure that once they have the people they want, they can prevent them from being seduced by the sexiness of cities like Boston and San Francisco and the big-money firms found there. Here's a look at what's working now for CIOs in Idaho, North Dakota and similar places.

Make Smart College Connections

Though it's tempting to try to pluck talent away from the big guys, mid-market IT departments find it more effective to keep a steady dialogue with local universities, and encourage new grads to stay in the area. This takes more than just the proverbial job posting or phone call to the college counseling office.

United Heritage Life Insurance has made its home in Meridian (just outside Boise, Idaho) since 1934 and likes the talent it finds there. The \$76 million company happens to be surrounded by colleges that contribute to the pool of some 60,000 IT professionals who live in the area, says Mick Ware, VP and CTO of United Heritage Financial Group and Life Insurance. As you might expect, Ware works with his HR department to get jobs posted at colleges like nearby Boise State and Albertson College. But he suggests going a step further and visiting the schools personally, as he does, giving presentations to business and IT classes.

While a campus visit from a senior-level exec like Ware can have a positive impact on recruiting, many CIOs believe it's even more effective to send employees who have recently graduated to visit their alma maters and encourage their former classmates to apply for work.

At Washington Savannah River, for instance, Stephens says she's

been able to draw upon the talent she's already hired to find reliable candidates. "We've got three new college hires this past year and they were all friends up at Clemson [University]," she says.

At Amcat, a call center software maker based in Oklahoma City, CTO Jim Texter puts a premium on local talent for a simple reason. "We have not had a lot of success at trying to draw people from outside of the area to Oklahoma," he says. "Unfortunately, we're not known as a high-tech area. A lot of people fear by moving here they'd hinder their career more than help it." He recruits heavily from Oklahoma State University.

Still, he says, don't put all your eggs in the local college basket, because college counseling offices and academic departments have a fair amount of churn. "We've seen enough turnover in the departments [at the colleges] that it's hard to keep a relationship going with them," he says. "As we find good candidates, we ask them for their friends and acquaintances. We usually find a sharp software engineer usually hangs out with other sharp software engineers. So if we get one, we can play into their network and get some others."

Tout Growth Opportunities

Nobody wants to work at an organization where they feel as though they can't move up the ranks—an impression some candidates might have after visiting a mid-market company. Before a company can even sell its relaxed culture and all the other niche benefits that go along with it, candidates (especially those coming out of the college ranks) want to feel as though they aren't hitting a dead end if they take a job with you.

Amcat's Texter hears this concern from some recruits as well as from some staffers hitting about the two-year mark with the firm. "They say, OK, I'm hired on here, but I might want to grow into management, but I can't because the team isn't big enough."

United Heritage's Ware says that he tries to argue the opposite to potential hires—at larger organizations, you'll have more difficulty moving up because you'll be lost in the crowd. "Some people are looking for a large organization where they think they can move up quickly," he says. "But it's probably the reverse; they find it's difficult to move up because there is a lot of competition. I think at a smaller organization you can move up quickly when you have the talent."

Also, in addition to offering the usual promotions, bonuses and incentives, it's important to make candidates feel they can have a specialty at the organization, rather than having to wear too many hats to compensate for a smaller IT staff, says Alere's Roggensack. "In some cases, when you get to the real small company, you become a jack of all trades," he says. "At the mid-market, we have more specialists."

Even so, many mid-market employees will have to juggle mul-

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“Tell recruits: Small development companies can take on new technologies, evaluate them and determine their feasibility before larger companies even decide to evaluate them.” —JIM TEXTER, CTO OF AMCAT

multiple functions—and you can tell recruits that’s not necessarily a bad thing, since IT workers who get trained in multiple areas tend to have better job security, says Washington Savannah River’s Stephens. “There is more opportunity to get involved with different types of things than there is with a larger company,” she says. “There, they know they can get more pigeonholed into a certain function within IT.”

Sell the Simple Pleasures

If your mid-market company’s CEO doesn’t keep a petty-cash box under his desk, odds are you’re going to be outbid on salary. Suzanne Fairlie, president of IT search firm Prosearch, says mid-market companies in more remote locations should not fear this disadvantage but rather, research the stunning differences in cost of living. When you crunch the numbers, she argues, you might be able to show that whatever the giant company is offering isn’t so great after all. Plus, remind candidates that big-city jobs mean big-city hours. “When you’re in New York or Boston, it’s not at all unusual to be working 60-to-70-hour weeks,” she says. “So, you can equate it to people, Yes, you’re making more money in New York, but you’re really working two jobs.”

In North Dakota, Mark Molesworth, enterprise project manager for the state of North Dakota IT department, says IT workers in his hometown of Bismarck (the state capital) want a better quality of life—including a lower crime rate, stronger schools for their children and more access to outdoor activities—things you just can’t find in many cities. “I live on the northwest edge of town, but I have three stoplights between me and work and it takes six minutes to get here,” he says. “And if I go in the other direction for less than five minutes, I’m on the shore of the Missouri River.” After work, he’s already fishing while the guys in Chicago sit on the expressway.

Money magazine rated Boise, Idaho, as the eighth best place to live in 2006, a factor that Ware knows plays in his favor. Access to outdoor activities—including downhill and cross-country skiing, snowmobiling, water skiing, fishing, bird and big game hunting, kayaking, white-water rafting, hiking, camping and mountain biking—is nearby. “These activities can all be done within a 30-minute drive from downtown Boise,” he says. “And there are so many other things that make this a community that people want to stay in,

such as the low crime rate, excellent education system, four distinct seasons and progressive cultural events.”

Even in Reno, which might be known more for its vices than anything else, a close proximity to Lake Tahoe has enabled Roggensack to attract a few candidates from the San Francisco area. “When we advertise, there are people from the Bay Area that are tired of traffic and the cost of living,” he says. “Reno is close to Tahoe, and there’s no state income tax. That kind of expands the talent pool. We don’t pay as much as the Bay Area, but it doesn’t cost as much.”

You might also want to convince new recruits that your team likes to play together as well as work together. In the more remote areas especially, Stephens says, it’s important to set up times for your younger employees to network. “There isn’t exactly a huge night life here in Aiken,” she says, chuckling.

Demonstrate Use of New Technologies

People coming out of college or switching from a big company to the mid-market want to feel as though they aren’t missing out on up-and-coming technologies. While your budget might not allow you to roll out the newest piece of software or equip everyone with the newest handheld gadget, it’s critical that a candidate feels as though you’re not too far behind. “We try to stay on the leading edge of technology and give them some excitement and motivation for staying with the company,” says Ware. “I think that’s better for those types of individuals that are new to the workforce.”

You need to stay reasonably current, says Amcat’s Texter. “I believe smaller development shops can move faster than large companies in adopting new technologies. In fact this is one advantage I believe smaller companies have over larger ones. Small development companies can take on new technologies, evaluate them and determine their feasibility before larger companies even decide to evaluate them,” Texter says. “We try to stay on the leading edge of technology without falling over to the bleeding edge,” he says. “We evaluate technologies constantly. We look at what we think will stick.”

As an example, Texter recently let his engineers start using Ajax programming techniques to help in their software development. In addition, he says, he always welcomes an employee’s input when someone comes forward with a new technology that could help the business.

You can tout this as an advantage to potential hires, he notes. Being more nimble, he says, his company can respond better to technology suggestions from the ranks. “I can move a lot quicker than

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the big organizations," he says. "We don't have quite the red tape and hierarchy structure."

Once You've Got 'Em, Keep 'Em

In some cases, if a candidate is happy with the location and the work environment is low-pressure yet prosperous, retention will take care of itself. But people get restless and mid-market companies are acutely aware of that fact. With a little more meat on their bones than small boutiques or startups, mid-market IT departments can ensure promotions and raises from time to time. But you can do much more than that to retain your staff.

When business conditions cripple your ability to promote staffers, move people around occasionally, even if a true promotion isn't immediately available, Prosearch's Fairlie suggests. "It's a great way to keep people, because they don't get bored," she says. Alere's Roggensack has employed this strategy by encouraging some employees to move to other areas of the business.

When this occurs, however, ensure a healthy give-and-take of talent, Roggensack advises. "As we have lost good people to other areas of the company, our positions have been filled by people from other areas," he says. "For example, a key user in one of the [business side] operational areas was promoted to IT as a junior business analyst since they knew both the operation and the system."

At Amcat, regardless of whether times are good or bad, Texter also employs this strategy because he wants to be cautious that his employees don't burn out. "If you leave them on the same thing, day in and day out, year after year, they are going to get tired and they are going to get bored," he says.

Also, work with your HR team to regularly evaluate employee benefits. Strong healthcare and 401(k) benefits, for example, can compensate for sluggish growth in salaries, especially for older workers, says Washington Savannah River's Stephens.

Don't forget the value of your travel budget. While people may bask in the small-town life, most value the chance to have new experiences, says Texter. Have your team members travel on the company dollar occasionally, and you can not only quell the restlessness of living in a more remote area but also improve their professional growth, he says. Amcat frequently sends its software engineers on business trips to interact with end users of the company's software products in both the United States and Europe. The engineers get to see new cities and meet new people while

How To IMPRESS Out-of-Town Candidates

So, you can't wow talented IT recruits with a fancy corporate campus, never mind a fancy salary? Neither can the other mid-market CIOs—but you must make the most of what you've got. Since you can't count exclusively on local talent, prepare to treat folks from across the country well, says Suzanne Fairlie, president of Prosearch, an IT staffing firm based in Philadelphia, who has helped place candidates at mid-market companies. Here are a few ground rules from recruiters and mid-market CIOs who've won at this game.

1. Do at least one, maybe two, in-depth phone interviews before you fly a candidate to your location. This way, you won't waste your time or theirs. "Don't just do one short interview; you need to give them time to get to know you," Fairlie says.

2. Roll out as warm a welcome as possible. "You don't need to have a limo waiting for them at the airport," Fairlie says. "But you need to make sure you arrange transportation and lodging. Make sure a person meets them at the airport. I've heard of [recruits] getting stuck and wheeling their suitcases down the street."

3. During the visit, have your staff sell the job too. If a candidate is middle-aged, talking to him about good healthcare benefits, the school system and a low crime rate will likely resonate, since taking care of the family may be a top concern. But CIOs say that fresh-out-of-college kids might relate better to their peers who recently took jobs at your organization. "We've had new hires recruit their friends," says Denise Stephens, CIO of the Washington Savannah River Co., who gathers recruits from schools like Clemson and the University of South Carolina.

4. Tout the ability to work from home, if available. Allowing an employee to put in some occasional time at home might just be an added perk, says Fairlie, and serve as a stark contrast to a big firm where only the big shots can utilize such an advantage. At Oklahoma-based Amcat, a call center software maker, CTO Jim Texter will tell recruits that he has even gone so far as to let some employees work remotely permanently when, say, that employee's spouse wants to relocate. "If that person is the right candidate, we try to allow them to go work in other areas and still work for us," he says.

5. Keep it real. While it's tempting to tell recruits that you're working with the same technologies as the big guys, don't embellish your company's résumé. "You can't say what you're not," Fairlie says. If you don't have the cutting-edge technologies, put your best foot forward but be honest, she advises. —C.G.L.

learning new ways they might better serve customers.

"As you develop a system, you're putting your heart and soul into it and there's nothing more satisfying than to go out and have the users praise what's going on or find out what's not working quite as right," says Stephens.

For others on your team, your out-of-the-way locale's calm environment and sense of community may be just the factor that keeps them around. As Molesworth says, "In New York, when you walk down the street, nobody makes eye contact," he says. "In North Dakota, you walk down the street and people smile and wonder how you're doing. I think that carries over in the business environment." **CIO**

Reach Associate Staff Writer C.G. Lynch at clynch@cio.com. To comment on this article, go to www.cio.com/article/109750.

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Inside ITIL: Practical Magic

If you're considering ITIL or have already launched down the ITIL path, you don't really need to worry about whether it works. It does. That's the consensus of members of the CIO Executive Council, many of whom are implementing several stages of ITIL's 12-process framework. ITIL (Information Technology Infrastructure Library) is a process-based best-practice framework for supporting and delivering IT services. Among its benefits are its ability to improve IT service levels and aid CIOs in helping their staff gain a better understanding of how IT affects the business. That said, implementing ITIL requires significant change management.



Brent Stahlheber

Seeing ITIL for What It Is

ITIL is a framework, not a set of instructions to be followed by rote. "ITIL is meant to keep you between the curbs of the road," says Brent Stahlheber, CIO at The Auto Club Group, a \$2 billion automotive travel services organization. Having participated in ITIL and led CMM implementations at his previous employer, Allstate Insurance, Stahlheber cautions CIOs to not get too caught up with the framework itself, but rather to focus on the processes behind it. "People spend way too much time creating complex diagrams instead of understanding the processes and how to best apply them," says Stahlheber.

When well-executed, ITIL can shift an IT organization's culture and focus from the technology (how things work) to the business strategy, how the services IT provides affect business performance. But culture change is probably the hardest type of change to manage, and ITIL's processes are only as effective as the degree to which your staff adopts them.

Ken Yerves, CIO at JM Family Enterprises, an \$11 billion Toyota distributor for the Southeast, cites the change in thinking and communication among his staff as ITIL success factors. "We would not have been as successful with ITIL had we not changed the way IT associates viewed the business. We were able to get them to think and talk in business terms," says Yerves. He laid the foundation for this mind-set by making ITIL part of IT's strategic plan. He assigned one person to evangelize ITIL, holding town hall meetings with all IT associates. And he incorporated ITIL into performance reviews. Yerves's ITIL mantra was simple yet powerful: "From servers to service."

Stahlheber prepared his organization for ITIL by first reorganizing IT from a siloed structure of network, mainframe, desktop and server support functions into one that is aligned with process. This silo structure had perpetuated an IT service perspective in which problems were passed from one group to another, instead of being solved collaboratively. This

Continued on Page 64

CASE STUDY :: The Measuring Stick

How Capital One determined the ROI of its ITIL

Capital One created a business case to clarify its goals and to quantify the value of ITIL. First, IT quantified (in general terms) the net present value of recently deployed IT-enabled products and services, and then,

using generally accepted industry metrics, estimated the savings that the improved incident, problem and change management processes would create. This revealed the potential difference between Capital

One's ROI in new products and services with and without ITIL in place.

After the analysis, the implementation of ITIL was estimated to save 10 percent to 20 percent in technology support costs

over a five-year period. Actual returns have been higher, according to Robert Turner, senior VP of enterprise technology organization, but it's difficult to attribute all of the savings directly to ITIL. —W.G.

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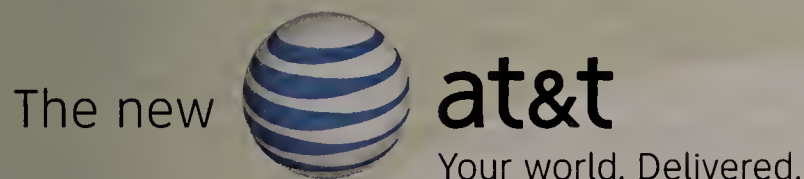
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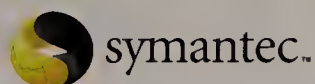
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Plan in Order to Implement

ITIL is not easy. Your approach must be systematic.

1. Have a clear vision for what you wish to accomplish and where you want to go.
2. Get executive sponsorship.
3. Communicate with and get buy-in from the business and your IT staff.
4. Determine your biggest opportunity for value, or where you can immediately benefit the business, and start there.
5. Understand where you are—look at your current key performance indicators and see how you're trending.
6. Establish simple metrics to calculate and communicate improvements in services.
7. Switch to business-oriented communication and language for service management and delivery.
8. Think long-term and make sure your processes are integrated—for example, incident tickets feed problem management, which allows for root cause analysis across the enterprise.
9. Don't lose sight of your vision (step number-one) and constantly check your progress against it.

—W.G.

Inside ITIL: Practical Magic

Continued from Page 60

led to a culture of blame and about 30 outages a month. Now service desk, operations and break-fix processes are spread across three levels of support: triage, diagnosis and root cause analysis. The process-based structure has helped ITIL do its work. Since implementation, Auto Club Group has experienced a decrease in service outages of about 86 percent. All of its infrastructure managers are ITIL Foundation-certified.

How to Get Started

With 12 service management processes, ITIL offers CIOs many starting points. And as is the case with any IT initiative, getting quick wins for customers is important to validate the effort.

ITIL is one of several initiatives to improve process at Capital One, which has received three awards for its success with ITIL from training and consulting firm Pink Elephant. Robert Turner, Capital One's senior vice president of enterprise technology organization, advises CIOs to "keep it simple, focus on one process at a time and start with simple metrics to help your business partner see value as you go."

Capital One's first ITIL implementation was incident management. To make sure IT was focusing on the right processes, Capital One created a global incident severity matrix, which measured IT incidents on a severity scale of zero to five. This helped prioritize problems and provided the opportunity for trend analysis. The tool was also helpful in demonstrating ITIL's near-term value to the business.

Next came ITIL's change management, followed by problem management processes, which Turner says allowed IT to provide an immediate lift for the business.

"Once you get incident and change management in place," Turner advises, "move on to problem management, which allows your staff to conduct root cause analysis across the organization and enables you to move from a reactive approach to proactive maintenance."

Incident management was also the ITIL starting point for both JM Family and Auto Club Group. Stahlheber established a service desk and single

point of contact for all problems, which gave Auto Club Group much better visibility into IT problems occurring across the enterprise. Since then, the company has implemented problem management, change management

and performance management and has started on configuration management.



Robert Turner

It Works If You Work It

When it comes to managing ongoing ITIL implementation, Council CIOs agree that IT leaders should apply the same standard project management best practices as they would to any other initiative. They should adapt the ITIL framework in a way that makes sense for their business, and be sure to take it one step at a time.

William Golden is a senior program manager for the CIO Executive Council. To comment on this article, go to the online version at www.cio.com/110156.

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Business Offices: CXO Media Inc., 492 Old Connecticut Path, P.O. Box 9208, Framingham, MA 01701-9208, 508 872-0080.

CIO (ISSN 0894-9301) is published semimonthly and as a combined issue Dec. 15/Jan. 1 by CXO Media Inc. Periodicals postage paid at Framingham, MA, and at additional mailing offices. Canada Publications Mail Agreement Number 1902075. CANADIAN POSTMASTER: Please return undeliverable copy to P.O. Box 1632, Windsor, ON N9A 7C9.

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Postmaster: Send change of address to CIO, P.O. Box 489, Northbrook, IL 60065-9816. Printed in the U.S.A.

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"A CIO should be enabling a business to grow."

Louie Ehrlich

VP of Strategy and Services & CIO of Global Downstream, Chevron Corporation

CIO Executive Council Member

(Source: Wall Street Journal, February 20, 2007)

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Who Do You Think You Are?

Don't hide behind one of these five masks when presenting your ideas

CIOs adopt a variety of personas when they pitch ideas, says Jeff Thull, author of *Exceptional Selling* and president of the Prime Resource Group. Instead of helping to prove their case, these personas often create barriers to effective communication.

"When you add in the IT personality," says Thull, "discussion can quickly devolve to an 'I'm right, you're wrong' debate."

Here, according to Thull, are five personas CIOs adopt that can cause other C-level executives to react negatively.

The **TEENAGER**

Most of our behaviors are learned from interacting with our families. If you ever watched an older sibling try to get Dad to lend him the car, you saw a presentation that included healthy servings of self-justification and whining. According to Thull, the less sophisticated a person is about communication, the more he draws on these learned behaviors. CIOs should be careful to avoid the whiny note when explaining their ideas, and they need to communicate the value proposition for the whole business.

The **PARENT**

The flip side of behaving like a teenager is acting like the parental unit. Do you remember how Dad and Mom either tried to bribe you into cleaning your room or threatened you in the thundering tones of absolute authority? CIOs need to remember that a) they're speaking to adults and b) they have no special position or authority inside the boardroom. Neither wheedling nor bribery nor thundering is going to work.



The **PROFESSOR**

A lot of IT people assume the role of professor. They act as if they have all the answers, and they get frustrated when the student (say, the CFO) isn't learning fast enough. Impatience with your peers is always a mistake. If you're trying to convince someone that a new approach or project has merit, present the value proposition, outline the risks (fairly), and then shut up and let your peers connect the dots. They're usually just as smart as you are.

The **POLICEMAN**

If you assume an accusatory tone when speaking with your peers, at best they're going to feel defensive and at worst downright annoyed. If something is going wrong, start by asking a question. What do they

think is the problem? Making it a conversation will prevent people from feeling attacked or lectured. Remember: No one handed you a badge when you became CIO.

The **DOCTOR**

If you must assume a persona, this is probably the best one. Prior to prescribing a course of treatment, a doctor makes sure the patient understands what's wrong. If your peers aren't aware that there's a problem, they won't be receptive to the cure. Someone with high cholesterol doesn't know it until he sees the results of the blood test, so it's important that CIOs have metrics to make their case. But don't carry this persona too far. Your peers will not wait months to see you or sit in your waiting room while you practice your putting.

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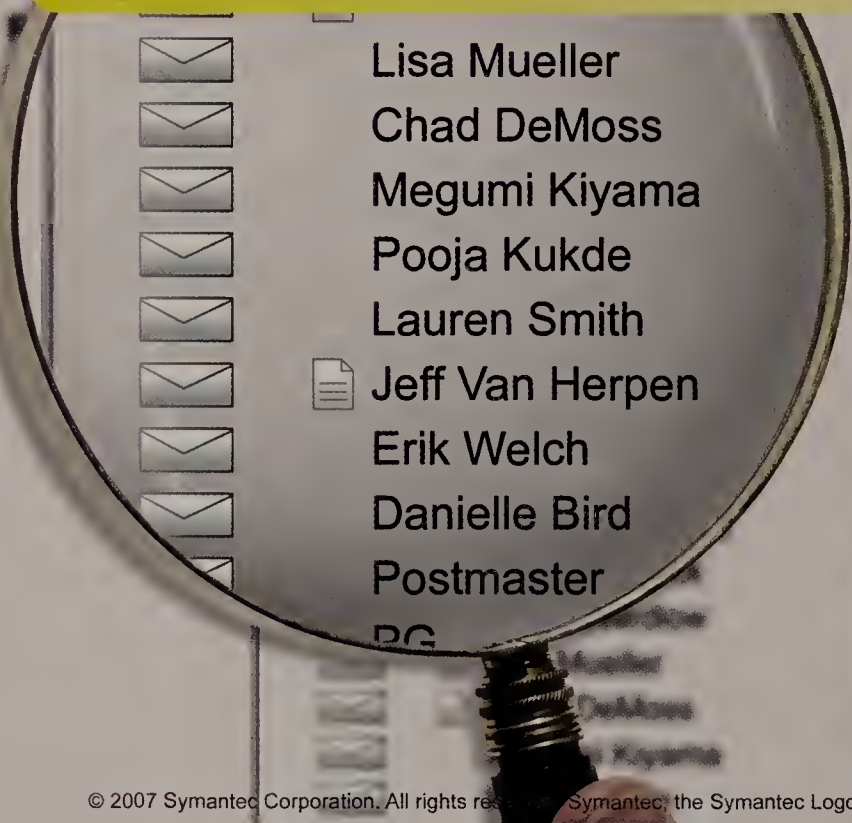
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